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ABSTRACT

This study investigated vocational readiness of adolescent American Indians with learning disabilities by examining tests and procedures employed by 24 school psychologists in Montana, assessing American Indian high school students on skills and interests useful in seeking and maintaining employment, obtaining work samples and vocational interest data from adults with learning disabilities who were attending a tribal college that provides services for students with disabilities, and conducting a telephone survey to determine postsecondary services available to American Indians with learning disabilities. The study found that: (1) school psychologists employed a variety of adaptations to tests and testing procedures; (2) high school age students with learning disabilities did not have strategies for seeking jobs and had not made career choices; and (3) most postsecondary school-age students were able and decisive in regard to career decisions and 80% showed a high vocational awareness level. Recommendations are made concerning psychologists, vocational readiness, and postsecondary services. An appendix offers a directory of postsecondary services for American Indians with learning disabilities living in Montana. (Approximately 50 references) (JDD)

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1992

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The content of this report is the responsibility of the American Indian Rehabilitation Research and Training Center and no official endorsement by the U. S. Department of Education should be inferred.

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ABSTRACT

Vocational readiness of adolescent American Indians with learning disabilities was investigated. An investigation of the tests, modifications and adaptations, and procedures employed by school psychologists in Montana was conducted. American Indian high school students who had been identified with learning disabilities were assessed on skills and interests which can be employed to seek and maintain employment. Work samples and vocational interest data were obtained from adults with learning disabilities who were attending a tribal college which provides services for students with disabilities. A telephone survey was conducted to determine post-secondary services available to American Indian people with learning disabilities.

School psychologists employed a variety of adaptations to tests and testing procedures. Recommendations were made to provide preparation for all school psychologists about cultural pluralism including inter-tribal differences among American Indian people. Preparation of American Indian persons who are knowledgeable and sensitive to linguistic and cultural differences as school psychologists is recommended.

Job skills of Indian students identified with learning disabilities were investigated. While there was variability in specific skills, it was recommended that specific vocational skills and information required to obtain employment should be taught. The students did not reveal possession of particular strategies for obtaining jobs or for remembering particular parts of conversations. Therefore, it was recommended that particular strategies for locating and obtaining employment should be developed and taught with specific reference to the reservations or communities in which the students live.

Testing of college level Indian students was obtained for the areas of physical and academic abilities related to job readiness and adaptability. Students' vocational interests and awareness were assessed as were students' perceived levels of required preparation for career readiness.

Post-secondary services for Indian persons with learning disabilities were surveyed to determine specific availability. The results were summarized and reported in the Appendix.

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INTRODUCTION

It has been reported that a greater percentage of American Indians is identified as learning disabled than any other minority group (O'Connell, 1987). This may be a result of inadequate tests and procedures for differentiating cultural characteristics from learning disabilities, an indication of a higher incidence of learning disabilities among American Indian people, or culturally inappropriate teaching strategies.

Definitions of Learning Disability

In 1963, the organization of the Association for Learning Disabled Children helped establish the term learning disabilities, which had been used by Kirk and Bateman (1962) as the term of choice for persons who had previously been called dyslexic, perceptually handicapped, minimally brain injured, and many other appellations. Contrary to the medical terminology, the term learning disability implies an educational problem.

However, establishment of the term did not provide agreement on the definition of the term (Hammill, Leigh, McNutt, & Larsen, 1981). The definition that became part of P. L. 94-142 probably has been the most widely used. It is as follows:

> "Specific learning disability" means a disorder in one or more of the basic psychological processes involved in understanding or in using language spoken or written, which may manifest itself in an imperfect ability to listen, think, speak, read, write, spell, or do mathematical calculations. The term includes such conditions as perceptual handicaps, brain injury, minimal brain dysfunction, dyslexia, and developmental aphasia. The term does not include children who have learning problems which are primarily the result of visual, hearing, or motor handicaps, of mental retardation, of emotional disturbance, or of environmental, cultural, or economic disadvantage. [Section 5(b) (4) of P. L. 94-142.]

There has been dissatisfaction with this definition, although it has been used to provide the basis for funding of instructional services. The reference to children in the

definition, probably based on an earlier belief that remediation would eradicate learning disabilities, is perhaps the most objectionable part of the definition. It is now believed that learning disabilities are persistent and pervasive throughout an individual's life, and a current emphasis is on providing services for college students with learning disabilities as well as vocational rehabilitation services for adults (National Joint Committee on Learning Disabilities, 1985).

Additionally, the reference to basic psychological processes created difficulty due to the difficulty in measuring these processes, resulting in the division of the field into two camps. There were those who thought that the processes could be and should be trained, while another group felt that direct instruction was more appropriate (Bateman, 1967).

For these and other reasons the National Joint Committee on Learning Disabilities (NJCLD), comprised of representatives of the American Speech-Language-Hearing Association, the Association for Children and Adults with Learning Disabilities (ACLD, now the Learning Disabilities Association), the Council for Learning Disabilities, the Division for Communication Disorders, the International Reading Association, and the Orton Dyslexia Society, developed a new definition (Hammill, Leigh, McNutt, & Larsen, 1981). It was approved by all of the governing boards of the participant organizations except the Association for Children and Adults with Learning Disabilities (ACLD). The NJCLD definition follows:

> Learning disabilities is a generic term that refers to a heterogeneous group of disorders manifested by significant difficulties in acquisition and use of listening, speaking, reading, writing, reasoning or mathematical abilities. These disorders are intrinsic to the individual and presumed to be due to central nervous system dysfunction. Even though a learning disability may occur concomitantly with other handicapping conditions (e.g., sensory impairment, mental retardation, social and emotional disturbances) or environmental influences (e.g., cultural differences,

insufficient/inappropriate instruction, psychogenic factors), it is not the direct result of those conditions or influences.

More recently, an Interagency Committee on Learning Disabilities was established and has made recommendations for changing the definition recommended by the NJCLD. The definition with their recommended changes (Interagency Committee on Learning Disabilities, 1989) follows.

> Learning disabilities is a generic term that refers to a heterogeneous group of disorders manifested by significant difficulties in the acquisition and use of listening, speaking, reading, writing, reasoning, or mathematical abilities, or of social skills. These disorders are intrinsic to the individual and presumed to be due to central nervous system dysfunction. Even though a learning disability may occur concomitantly with other handicapping conditions (e.g., sensory impairment, mental retardation, social and emotional disturbance), with socioenvironmental influences (e.g., cultural differences, insufficient or inappropriate instruction, psychogenic factors) and especially with attention deficit disorder, all of which may cause learning problems, a learning disability is not the direct result of those conditions or influences.

The Association for Children and Adults with Learning Disabilities (ACLD, now the Learning Disabilities Association) developed a separate description of the condition (ACLD, 1986) which was approved by the ACLD Board and Delegate Assembly in March, 1986. It is as follows:

> Specific Learning Disabilities is a chronic condition of presumed neurological origin which selectively interferes with the development, integration, and/or demonstration of verbal and/or non-verbal abilities. Specific Learning Disabilities exists as a distinct handicapping condition and varies in its manifestations and in degree of severity.

Throughout life, the condition can affect self esteem, education, vocation, socialization, and/or daily living activities.

Identification

Identification procedures and tools have been controversial. Bateman (1967) described divergent philosophies and techniques for identification. She identified one approach which relied primarily on causes as an etiological approach, and another which she called diagnostic treatment that attempted to use tests such as the *Illinois Test of Psycholinguistic Ability* or the *Frostig Developmental Test of Visual Perception.* These were popular tests in the 1960s which attempted to identify processing problems which interfered with learning; although, there was also controversy about whether the processing strengths were to be used to teach or whether effort should concentrate on improving the deficit. She identified a third approach, task analysis, which de-emphasized attempts to identify the processes believed to be causing the problem, but identified what the child needed to know and led to the emphasis on direct instruction.

While differences remain between persons who describe themselves as behaviorists and those persons who advocate cognitive approaches, identification procedures - and controversy - have more recently centered on how to determine the discrepancy between achievement and ability (e.g., Hessler, 1987; Kavale, 1987; Lyon, 1987; Mastropieri, 1987; Mellard, 1987; Parrill, 1987; Reynolds, 1985-86; Scruggs, 1987; Sinclair & Alexson, 1986; Swanson, 1987; Willson, 1987; Willson, Cone, Busch, & Allee, 1983). A discussion of these psychometric and statistical issues is beyond the scope of this report. However, identification issues remain controversial.

Regardless of the procedure employed to determine a discrepancy between ability and achievement, it depends on reliable and valid measurement of both. Appropriate testing tools and procedures have not been generally available to test American Indian children.

Measuring American Indians' Ability

It must be emphasized that there is no single American Indian culture. The Bureau of Indian Affairs (Federal Register, 1988) recognized slightly more than 300 American Indian tribes and 500 Alaska native villages and entities. As Neely and Shaugnessy (1984) pointed out, American Indians do not fit a single stereotype. Bearcrane, Dodd, Nelson, and Ostwald (1990) indicated that American Indians range from persons whose ancestors were American Indians but who are totally assimilated into the majority culture to those persons who have retained American Indian ancestral language, values, attitudes and beliefs; or they may be persons who do not fit well in either culture. The persons who have retained their American Indian culture may be monocultural or bicultural with the ability to fit in either culture.

There is no single recognized standardized norm-referenced test of intelligence developed for the diversity of American Indian peoples and cultures. Dana (1984) pointed out that intellectual assessment of American Indian children has been carried out using tests that are generally inappropriate for description of their intellectual functions or for predicting their educational outcome. However, within the field of learning disabilities, with the present emphasis on determining the discrepancy between ability and achievement, the matter must be addressed.

High scores on standard tests of intelligence predict success in conventional schools for American Indian students, as well as for students in the majority culture (Persi & Brunatti, 1987). However, it has been reported that an American Indian's lack of a high score, particularly a verbal score, does not necessarily indicate a lack of ability (e.g., Naglieri, 1982). Hynd and Garcia (1979) indicated that performance scales might predict potential to perform, but that verbal scales predict levels of functioning within English language academic settings. Other studies (e.g., McShane, 1980) have pointed out that

(English) vocabulary is frequently the American Indian student's lowest score. Low verbal scores are expected when youngsters are bilingual and tested in English.

Bearcrane, et al. (1990) pointed out a number of other reasons why American Indian children who are not bilingual may also exhibit language differences which would impede academic performance and also yield low verbal scores on tests of intelligence. For example, parents who are members of different tribes, and whose first language is a tribal language, may teach their child only English. However, since English is the parents' second and less well developed language, the child may learn something other than standard English. Other bilingual parents may decide it would be better for the child to speak only English, although they may continue to converse with each other in their tribal language. In this case a child might be able to understand the tribal language, but not speak it. However, the child would learn English as a primary language from parents who are teaching the child their less well developed language. Additionally, many reservations are in remote and isolated areas with words and phrases used differently than they are used in standard English. Harris (1985) provided a number of possible reasons why American Indian culture may contribute to less use of language than other groups and also pointed out that a formal testing procedure is likely to be one in which the American Indian child will not exhibit true levels of linguistic competence.

An obvious solution to the problems mentioned above would be to develop a test or tests which would be appropriate for American Indian populations. However, the potential problems, as well as cost, are enormous when the diversity is recognized. In Montana alone there are seven different reservations and some of those are shared by more than one tribe. McShane and Plas (1984) pointed out that a comprehensive theoretical model of Indian cognitive functioning relative to the WISC-R tasks would be useful. However, they also pointed out it would need to incorporate otitis media history and auditory acuity, oral-linguistic and nonoral-visual normative behavior patterns, differential neurological

functioning, variation in language styles, acculturation factors, tribal membership and reservation location, age and sex, as well as achievement-intelligence relationships. It is clear that this is a complex issue, which reaches far beyond just developing another test.

Alley and Foster (1978) reviewed the necessity of providing non-discriminatory testing for all children. They indicated there have been four popular procedures or adaptations advocated to comply with the necessity for non-discriminatory testing. Tests can be translated into the minority language or they can be normed on minority groups. They also pointed out that minority examiners can test the minority group child or the majority group competencies needed to survive in the majority culture, then the child can be evaluated on those. They also pointed out the problems with each of the procedures. Additionally, Fuchs & Fuchs (1989) reported that some minority group children (Black and Hispanic) score consistently and dramatically higher with familiar examiners. One can speculate that American Indian children might also score higher with familiar examiners.

Despite the lack of appropriate tests and procedures, in Montana American Indian children with learning disabilities must be identified according to the rules and regulations of the Montana Office of Public Instruction which govern testing of all children using prescribed tests and procedures if they are to receive special educational services. The Montana Office of Public Instruction employs the definition of learning disabilities used in P. L. 94-142. However, it does not require verification of the existence of a processing problem. Identification of a discrepancy between potential and achievement is mandated, although the existence of only a discrepancy is deemed insufficient for identifying a person as learning disabled. Therefore, it seemed appropriate to identify the tools and adaptations being made by psychologists in Montana. A survey was used to identify these tools and adaptations, as described in the section on Methods.

Persistence of Learning Disabilities

Contrary to earlier views, special education does not always ameliorate learning disabilities. For many persons with learning disabilities, special education has not been powerful enough to eliminate the need for special consideration, accommodations, and compensatory procedures. Consequently, attention has been devoted increasingly to the problems of adults with learning disabilities, including recognition that few persons in rehabilitation professions have been specifically prepared to work with adults with learning disabilities (NJCLD, 1985). However, the results of a recent survey indicated that not all master's degree rehabilitation counselor education programs presently address learning disabilities (Dodd, Nelson, Ostwald, Fischer, & Rose, in press). Additionally, it has been reported that a greater proportion of American Indians is identified with learning disabilities than other groups (O'Connell, 1987).

The need for addressing multicultural concerns (e.g., LaFramboise & Rowe, 1983; Lowrey, 1987) and learning disabilities (e.g., Growick & Dowdy, 1989; Geist & McGrath, 1983) have been supported in recent literature on rehabilitation counseling. Additionally, rehabilitation counselors who work with American Indian clients have indicated a need for greater preparation for working with American Indians (Martin, Frank, Minkler, & Johnson, 1988). However, when specific minority cultures are addressed in training programs for rehabilitation and other counselors, American Indians are infrequently addressed (Dodd, Nelson, Ostwald, & Fischer, in press). Follow-up studies of students with learning disabilities have indicated considerably less vocational success among persons with learning disabilities than among persons without learning disabilities (e.g., Haring, Lovett, & Smith, 1990). However, there is an absence of information on the vocational readiness of American Indian people with learning disabilities, and there have been no reports on the readiness of American Indian persons with learning disabilities to enter the job market. Recent research on non-Indian adolescents and adults with learning

disabilities indicates they lack strategies or executive control for carrying out complex tasks and supports effectiveness of strategy instruction for remediation (e.g., Buttrill, Miizawa, Biemer, Takahashi, & Hearn, 1989; Schumaker & Deshler, 1984; Warner, Schumaker, Alley, & Deshler, 1989).

Problem

The initial problem was to identify tests used and procedures followed to identify American Indian children with learning disabilities. The second problem was to determine the vocational readiness of American Indian students with learning disabilities who are close to exiting high school. The third problem was to identify what post-secondary services are available to American Indian people with learning disabilities in Montana.

The particular factors which impact the importance and need for this information:

1. Rates of unemployment among Indian people are high ranging from 70.8% to 80% nationally and 44.3% to 33% in Montana (U. S. Department of Commerce, 1986). Indian people with disabilities will be vying for the jobs in the same market as other tribal people.
2. In order to compete for the jobs that may exist, persons with learning disabilities must have the vocational skills which promote equitable consideration for jobs.

METHOD

Survey of Psychologists

The directory of Montana school psychologists was obtained, which listed 155 school psychologists. Letters were sent to each of them with a brief explanation of the purpose of the project. They were asked to fill out and return a postcard indicating the number and percent of American Indian youngsters in their clientele. Individuals who did not have American Indian youngsters in their clientele were requested to indicate the primary problems in identifying adolescents with learning disabilities for all ethnic groups. A follow-up letter was sent to persons who did not respond to the initial request. One hundred and eight (70%) persons returned the postcards. Respondents who had substantial numbers of American Indian youngsters in their clientele were contacted.

Interviews. Twenty-four of the twenty-six school psychologists who had ten or more American Indians among their clientele were contacted by telephone and interviewed regarding their opinions and practices of procedures described by the Montana Office of Public Instruction. To initiate the interview, the psychologists were asked to react to the list of tests in Montana Office of Public Instruction (1988) material on the use of a regression analysis to determine a discrepancy between potential and achievement. This document explains the use of a regression analysis and gives sample devices which could be employed including the coefficients of correlation between the achievement devices and the tests designed to assess potential. They were asked to indicate any problems they had with the test devices. They were also asked to indicate any other test devices they employed.

Vocational Skills of Adolescents

It was essential to secure the support of the participating schools for this study which included both public schools and a Bureau of Indian Affairs contract school. In a meeting with the Northern Cheyenne Education Commission, the Commission supported the

project, but requested that contact with Busby High School be delayed until the new superintendent was hired and advertising for 14 new teachers was completed. Their request was honored and the visit to Busby High School was rescheduled. The principal investigator contacted and made site visits to schools on both the Crow Reservation and the Northern Cheyenne Reservation to explain the project and to obtain cooperation. The principal investigator also presented the project to the Busby School Board. Busby is a tribally controlled Bureau of Indian Affairs School; they agreed to participate.

The secondary schools with a large enrollment of Crow students in attendance were: (a) the off-reservation Hardin High School where the Crow students are in the minority, located approximately 12 miles from Crow Agency where the Tribal government and offices are located; (b) Plenty Coups High School, located on the Crow Reservation in Pryor with nearly 100% Indian enrollment; and (c) Lodge Grass High School, located on the Crow Reservation in Lodge Grass with nearly 100% Indian enrollment.

The secondary schools with a large number of Northern Cheyenne students in attendance were: (a) Colstrip High School in Colstrip, which borders the Northern Cheyenne Reservation, with Indian students in the minority; (b) St. Labre Catholic High School bordering the Northern Cheyenne Reservation in Ashland with nearly 100% Indian enrollment; and (c) the tribally controlled Bureau of Indian Affairs Busby High School in Busby on the Northern Cheyenne Reservation with nearly 100% Indian enrollment.

Each school has unique characteristics; however, one common occurrence is that many students enroll in one of the schools serving that reservation, and then transfer for a time to another school. Additionally, marriage of people from different tribes may result in some students attending school on one reservation and later attending school on another reservation. Indeed, the enrollment patterns could serve as the basis for further research.

School personnel were cooperative at each of these schools, although not all schools provided useable data. For example, St. Labre Catholic School is a private school which

does not identify students with disabilities. Therefore, they could not participate in the study. The only student at Colstrip High School whose parents gave written permission to participate had a primary physical disability. These data were not employed because the student did not appear to be representative of the population being studied. Therefore, the students in this study attended Busby High School, Hardin High School, Lodge Grass High School, or Plenty Coups High School.

Instrumentation. Since there are no standardized tests with norms for unique populations like American Indians, norm-referenced tests were not used. It was perceived that the more useful and relevant information would be obtained with criterion-referenced tests to determine what students could and could not do. Test items were selected from the vocational section and other relevant sections of the *Brigance Diagnostic Inventory of Essential Skills* (Brigance, 1981). In addition, since findings indicate a lack of strategies to facilitate learning and other complex tasks for learning disabled adolescents in the mainstream population (University of Kansas Institute for Research on Learning Disabilities, 1990), two questions were devised which required formulation of a strategy. These two questions relate to strategies which would be useful in finding a job or when interviewing for a job. Finally, because it is important to be able to use a telephone book to identify the telephone number of a potential employer or to find a prospective employer in the yellow pages, two questions were devised to assess telephone book skills.

Vocational Readiness of College Students

It was possible to cooperate with Salish Kootenai College to obtain vocational test data from adult students with learning disabilities. These students with learning disabilities at the college level were also tested in the areas of vocational readiness. Testing for the college students also covered physical ability areas, job preparation, and vocational interests. These assessments included data obtained from the *Microcomputer Evaluation*

and Screening Assessment (MESA) (Valpar International, 1984), and the *Vocational Division Making Interview* (VDMI) (Czerlinsky & McCray, 1986).

Post-Secondary Services

Seven tribal colleges, as well as other private and public post-secondary education institutions, were to be contacted by telephone. Additionally, the telephone yellow pages were employed to identify agencies that might provide services (see Appendix). Persons who could provide information about services for persons with learning disabilities were identified as respondents. They were asked to identify testing, special accommodations, employment assistance, or other services they provide, including services exclusively available to American Indians.

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RESULTS

Survey of School Psychologists

The most striking finding from the survey of school psychologists was the number (50) of school psychologists who served up to nine American Indian youngsters among their clientele. Thirty-one reported serving fewer than five each. Twelve school psychologists reported having no American Indian clients. There were 26 school psychologists who reported having more than 10 American Indian students among their clientele.

Of the 24 school psychologists interviewed, 15 were male and nine were female. Age of the interviewees was not requested. Average years of experience was 10.2, ranging from four to 17 years. The number of American Indian clients reported ranged from 10 to 1200. While the number of clients varied considerably, the most frequently reported number of Indian clients was 40 (reported by four psychologists). Five psychologists reported having 500 or more, while nine reported having 20 or fewer. Four persons reported between 60 and 120. Some school psychologists served several schools which may be all Indian and other schools which are predominantly non-Indian.

Interviews were initiated by presenting the psychologists with a list of tests from the Montana Office of Public Instruction (1988). They were to indicate what tests they used and were asked to react to the use of regression analysis which could be used, for assessing ability and achievement and to indicate any problems they encountered. They were also asked to identify any other test tools they employed. The number of times psychologists indicated they used the instruments and the number of times they used other instruments appears in Table 1. The only test used by all 24 psychologists was the WISC-R, while 22 (92%) indicated they employ the Woodcock-Johnson Psychoeducational Battery. Additionally, 18 (75%) used the Key-Math-R, although two did not use the latest 1988 edition. The Woodcock Reading Mastery Test (WRMT) was used by 13 (54%).

Eleven (46%) used the Peabody Picture Vocabulary Test-R. Less frequently used tests were: the Iowa Test of Basic Skills (ITBS) used by seven psychologists; Peabody Individual Achievement Test (PIAT) used by seven; and the Wide Range Achievement Test (WRAT) used by five psychologists. The names of additional tests employed included the Kaufman Assessment Battery for Children (KABC) which 12 (50%) employed; the Bender Visual Motor Test (Bender) used by nine (37%); and the Stanford-Binet used by five (21%).

Table 1

Test Tools Used

Recommended Tests Used	*N*	% Psychologists Using Test
WISC-R	24	100
W-J	22	92
Key Math	18	75
WRMT	13	54
PPVT-R	11	46
ITBS	7	29
PIAT	7	29
WRAT	5	21

Other Tests Used by Four or More Psychologists

Tests Used	*N*	% Psychologists Using Test
K-ABC	12	50
Bender	9	36
SB	5	21
KTEA	4	17
Beery	4	17
Burk's	4	17

Table 1 (cont'd)

Test Mentioned Infrequently

Tests Used	*N*
MBTI	1
McCarthy Scales	2
TOAL	1
DTLA	3
SRA	1
Piers-Harris	2
Luria Nebraska	1
Slosson Reading	1
DAP	2
TOWL	2
Wepman	1
Achenbach	1

The Kaufman Test of Education Achievement (KTEA), Burk's Behavior Rating Scales (Burk's), and the Test of Visual-Motor Integration (Beery) were each mentioned four times (17%). The Detroit Test of Learning Aptitude (DTLA) was used by three psychologists, while the McCarthy Scales of Children's Abilities (McCarthy Scales), the Piers-Harris Children's Self Concept Scale (Piers-Harris), Slosson Oral Reading Test, Draw a Person (DAP), and the Test of Written Language (TOWL) were each mentioned twice. The Child Behavior Checklist and Revised Child Behavior Profile (Achenback), the Myers-Briggs Type Indicator (MBTI), Test of Adolescent Language (TOAL), SRA Achievement Series (SRA), Wepman Auditory Discrimination Test, and the Luria Nebraska Neuropsychological Inventory were each mention by one person.

Much of the present controversy surrounding identification of persons with learning disabilities deals with the discrepancy between ability and achievement. Since identification of this discrepancy is mandatory in Montana, the psychologists were asked if they employed a discrepancy model. The results appear in Table 2.

Table 2

Use of Discrepancy Models

Discrepancy Model	Number of Users	% of Users of Discrepancy Models
Regression Model	13	68%
Standard Score Model	5	26%
Grade Level Model	3	16%
Constant Deviation	2	
Graduated Deviation	1	
Expectancy Formula	2	11%
Clinical Judgement only	2	11%
Total Users	19	100%*

Note: *Some psychologists use more than one model.

Nineteen (79%) of the psychologists indicated they use a discrepancy model, while two indicated they rely on clinical judgement. Discrepancy models typically convert measures of potential and achievement to either age or grade equivalents, which are then subtracted to determine if a discrepancy exists. Reliance on clinical judgement suggests that the psychologist's experience and judgement are permitted to temper the quantitative test outcomes.

Thirteen (68%) of those who use a discrepancy model indicated they employ a regression model, which the Montana Office of Public Instruction (1987) lists as superior to the other models. A regression model is a statistical model based on the regression phenomenon and the correlation between specific devices designed to assess potential for learning and achievement. When the results of the test for potential are employed in the formula, it yields the expected achievement level for specific confidence intervals.

Three (16%) of the nineteen users indicated they use a grade level model. Of those three persons, two used a constant deviation model while the other one used a graduated deviation model. A constant deviation requires a discrepancy between grade level of functioning and ability, while the graduated deviation model requires a greater discrepancy

for older children. For example, one year below grade level in the first grade might be sufficiently discrepant to warrant a learning disability diagnosis, while two years below grade level would be required of fifth and sixth grade youngsters for that diagnosis. Two (11%) of the psychologists used expectancy formulas. Five of the 19 persons who used a discrepancy model used a standard score model. That is, the results are converted to standard scores so direct comparisons can be made. Two psychologists used clinical judgement only.

The psychologists were asked if they used other models for determining the discrepancy between ability and achievement. Twenty-one (88%) of the psychologists indicated they used other means. Table 3 shows the results, indicating that nine (43%) of those who used other means attempted to identify processing difficulties, while 15 (71%) used curriculum-based assessment.

Table 3

Other Modes for Discrepancy Determination

	Number Using other modes	% Psychologists using other modes
Process Assessment	9	43%
Curriculum Based Assessment	15	71%
Total using Other Modes	21*	100%*

Note: * Some psychologists use more than one other mode.

The psychologists were asked if they made adaptations to the test tools or results. Twenty-one (88%) indicated they did; some made more than one adaptation. Whenever it seemed reasonable to categorize responses they were combined as shown in Table 4. Thirteen (54%) indicated they place greater weight on performance scores. Six persons (24%) indicated they considered language differences, and four (17%) indicated they used

interpreters. Two persons (8%) indicated they consider the family history. Two persons (8%) indicated they consider cultural factors, while two (8%) employed special norms.

Table 4

Use of Adaptations to Tools and/or Results

Adaptation Category	Number making adaptation	Percent of all Psychologists
Greater weight on performance scores	13	54%
Language considerations	6	25%
Use interpreters	4	17%
Family history	2	8%
Considers culture	2	8%
Special norms	2	8%
Total number of making adaptations	21	88%

Additionally, one person indicated adapting instruction, three persons said they would not alter standard procedures, but one of them made adjustments in the interpretation of results. One person used the KABC whenever possible to avoid the language issue. One of the four persons who said they used interpreters pointed out the difficulty in doing so because the Crow language is so descriptive it gives the answers away.

Finally, each respondent was asked to make any comments in regard to American Indians and learning disabilities. Three persons said the definition was inadequate and one said that the learning disabilities classification is too broad. Five persons mentioned difficulty with testing devices including one person who indicated the need for Montana norms. Several persons mentioned language problems, including one who said that American Indians speak a different English, and therefore demonstrate a different language delay than their non-Indian counterparts. Another mentioned the problems encountered in learning a second language.

Cultural differences were mentioned seven times, including one person who felt education was not valued by American Indians, and another who cited American Indians lack of exposure to opportunities for learning. The difficulty in establishing rapport with American Indian students was mentioned by one person. One person pointed out it was necessary to do a lot of follow-up questioning while testing which might interfere with standard procedures. Shyness was also mentioned, especially with respect to younger American Indian children.

One person mentioned that long bus rides to school interfere with academic progress. One person mentioned dysfunctional families, while another indicated widespread problems with drug and alcohol consumption before and after birth. One person mentioned the frequent moves and transfers from school to school.

Two persons indicated they felt American Indians were often over-identified with many misplacements. One person indicated that American Indians were placed in special education without diagnosis. The need to rely heavily on clinical judgement and experience was mentioned. Several persons mentioned the expectation for American Indian children to be functioning below grade level in academic achievement, and the necessity of considering that in order not to identify too many as learning disabled.

Adolescents with Learning Disabilities

Subjects

The participants were 24 American Indian students who had been classified as learning disabled. Of that number, 18 (76%) were male and six (24%) were female. The mean age was 18 years, ranging from 15 years and five months to 20 years and six months with a standard deviation of 13.45 months. There were 21 Crow Indian students and three Northern Cheyenne students.

Since there appeared to be no appreciable differences in responses from these two groups of students, the data were combined to form one group. Of the 24 students, seven

reported they spoke the Crow language, 13 reported they understood the Crow language, and one student understood the Cheyenne language. None of the students with learning disabilities spoke Cheyenne.

Vocational Readiness

In order to assess vocational readiness, two questions on job-seeking strategies were devised, along with two questions on using a telephone book. In addition, items were selected from the *Brigance Diagnostic Inventory of Essential Skills* (Brigance, 1981) vocational and other sections which provided items believed to be relevant to employment. Those items were administered individually to determine whether the students possessed vocationally relevant skills.

Strategies. Two questions requiring a strategy for an appropriate response were devised. In addition to the responses form American Indian adolescents with learning disabilities, responses to the same questions were provided by 12 Northern Cheyenne and Crow adolescents selected for participation in a program for students with potential for college, including students who attended the same schools as students in the present study who were selected for a different project. Their data served as the basis for determining appropriate responses and as a contrast group. The students in this contrast group were not diagnosed as having any learning disabilities.

The first question was "If you wanted a job what would you do?" The students in the contrast group indicated a variety of strategies. One student indicated "looking in the newspaper, calling for an appointment, being on time for an appointment, and asking the interviewer questions" while another indicated "Looking for ads, calling, presenting a resume, and interviewing". In contrast, five (22%) of the students with learning disabilities provided a response including looking for help wanted signs or using newspaper advertisements, while 18 (78%) responded they would just get a job without indicating a strategy for finding one.

The second question which required a strategy for an appropriate response was "What would you do if you needed to be sure to remember the main parts of our conversation?" Eleven of the 12 students in the contrast group responded with strategies involving note-taking. Six (26%) of the students identified with learning disabilities indicated they would take notes, and 17 (78%) responded that they would just remember without indicating a strategy to aid recall.

Telephone Book Skills. The students were given a telephone book, the name of a person whose name was in the telephone book, and the name of the city in which the person lived. Then they were asked to find the telephone number of that person. Of those persons who completed the task, 14 (63%) of the students found the correct telephone number, while eight (36%) did not find the telephone number. Next the students were asked to locate a particular bank in the yellow pages. Of the number completing the task, 11 (52%) located the bank, while 10 (48%) did not locate the bank.

Vocational Direction Words. Students were presented with a list of 15 vocational direction words. These words included those which would be useful in an employment situation. None of the students with learning disabilities recognized all 15 words; however, more that half of the students recognized all but three of the words. The three words recognized by fewer than half of the students were 'seniority', 'compensation', and 'substitute'.

Employment Abbreviations. The students were asked to identify 14 frequently used abbreviations in job advertisements. More than half of the students could not accurately identify the following: Appt. for appointment, Betw. for between, Eve. for evening, Mgmt. for management, Perm. for permanent, HSG for high school graduate, Trnee, for trainee, Ins. for insurance, Lic. for license, and Refs. Req'd for references required. The most frequently missed (95%) abbreviation was EOE for equal opportunity employer.

Vocational Words. The students were asked to pronounce five words frequently used in vocational settings. Four of the words (foreman, confidential, bureau, and certificate) were read accurately by more than half the sample. The word 'incapacitated' was pronounced accurately by three (17%) of the 20 students attempting this item.

Alphabetical Sequencing. The students were presented with five letters. They were asked to indicate the letter which precedes and follows the letter in the alphabet. Seventeen (77%) correctly indicated that J precedes K and that it is followed by L. Nineteen (86%) correctly indicated that B precedes C and that D follows it. When the students were presented I, 18 (82%) were correct in their response. Nineteen (86%) were correct when presented G and 20 (91%) were correct when N was presented.

Money and Dates. The amount "one dollar and twenty-seven cents" was stated orally. Each students was asked to write it in arabic numerals as "$1.27". Nearly all students (92%) wrote the amount correctly. They were also given combinations of coins in amounts less then $1.00 and were asked to indicate orally the total amount of money. They responded correctly with greater frequency with smaller amounts of money: $.12, 92% correct; $.57, 71% correct; and $.79, 50% correct. When given a combination of coins totalling $1.45, 25% responded correctly. They were given a sample of dates written in the following format: April 23, 1985 and were asked to write it using numbers (4/23/85). The majority (70%) completed the task as requested.

Health and Safety Signs. They were asked to pronounce three signs 'expiration date', 'warning', and 'keep refrigerated', arbitrarily selected from a longer list. All got the 'warning' sign correct and most got the other two correct (Expiration sign, 78%; keep refrigerated, 91%).

Employment Signs. The students were presented with a list of 20 employment signs, such as 'help wanted' and 'apply at personnel office' and were asked to read them orally. The students read most of the signs correctly. For example, all of the students read

correctly: 'help wanted', 'apply here', 'job information', 'employment office', 'no help wanted', 'apply at office', and 'part-time help wanted'. The signs most frequently missed were: 'receptionist' (43.5%), 'director of personnel' (30%), 'authorized personnel only' (30%), and 'no unauthorized persons' (36%).

Help Wanted Advertisements. The students were asked to read two Help Wanted advertisements with abbreviations. They were scored as accurate if they were 80% correct. Using this criterion, 13 of the students did not accurately read one of the advertisements, while eight (44%) accurately read both.

Cost Determination. The participants were presented with three items worth a total of $.65. They were asked to calculate the total cost without paper and pencil. Eighteen (78%) arrived at the correct response.

Traffic signs. The students were asked to read three parking signs. Nineteen (82.5%) accurately read 'Loading Zone', while 15 (65%) accurately read 'No Parking Tow Zone'. Eight students said the numeral 'two' instead of 'tow'.

Food vocabulary and recipe directions. The students were presented with five words employed in food preparation: 'simmer', 'barbecued', 'preserved', 'quartered', and 'scalloped'. While 'scalloped' was missed by eight students (35%), the other words were read accurately by more than 75% of the students. They were also presented with five directions used in recipes: 'thaw before cooking', 'finely chop', 'bring liquid to a boil', 'chill and serve', and 'cool and remove'. Nineteen (83%) correctly read 'bring liquid to a boil' and 21 (91%) correctly read 'finely chop'. Twenty-two (98%) correctly read the other directions.

Measurement. The students were asked to measure lengths in whole and half inches with a ruler. Seventeen (74%) accurately measured a three-inch length, while 15 (65%) accurately measured a three and one-half inch length.

Fabric and Food Labels. Each student was asked to read three fabric and food labels. Slightly more that half (12, 52%) correctly identified 'concentrated', a majority (16 to 22 or 70% to 96%) correctly identified the other labels: 'preshrunk' (70%), 'dry clean only' (87%), 'machine wash' (96%), 'refrigerate after' (70%), 'best when purchased' (96%).

Applications

The students were asked to complete several job-related forms and applications (employment, withholding certificate, social security number, and learner's permit). The responses were tallied for each part of the application. However, the areas of difficulty were identified from all of the forms and reported once. For example, social security numbers appeared on several of the forms, but were addressed as an area of difficulty only once. Missing responses of 50% or more of the students included social security number and work experience. References were missing from 16 (67%) of the applications, which could reflect a high rate of unemployment or limited opportunities for employment. Telephone numbers were missing from 13 (54%), which may reflect the high percentage of homes without telephones. Nineteen or more correctly filled out their name, address, and education, and provided signatures and dates.

On the withholding form, nineteen (79%) did not respond to the request for the number of allowances, and seventeen (71%) did not respond to whether additional deductions were requested. Thirteen (54%) did not respond to the item asking whether there was an exemption from withholding. Twenty-one (86%) responded appropriately to marital status.

On the application for a social security number eight, (33%) did not indicate their present age. On the form used (Brigance, 1981) there was a request for race or color with spaces to check beside white, negro, or other; this was omitted by six students. Most (19

or more) provided their full name at birth, place of birth, mother's full name, father's full name, and mailing address.

On the learner's permit application, eighteen or more (86%) provided height, weight, color of hair, and color of eyes. Eleven (50%) did not respond to the item requesting the class of permit, while six did not respond to the question asking if they had been convicted of a crime.

Vocational Preferences (Brigance)

Participants were asked to complete a questionnaire (based on Brigance, 1981) regarding their work preferences. Twenty-one students responded to the questionnaire, although some did not answer every item. Eighteen (86%) of those responding indicated they would prefer to work with others rather than alone. Seventeen students (81%) indicated they would rather have work in which they stand or walk rather than sit. Fifteen students (71%) indicated they would prefer new tasks over repetitious tasks. Nineteen students (91%) indicated they prefer to perform tasks rather than telling others to perform the tasks.

Thirteen students (62%) indicated they would rather work outdoors than indoors. Thirteen of 20 responding students (65%) indicated a preference for working in a quiet environment rather that a noisy one. Fifteen (71%) indicated they would prefer a job where there is little change rather than many changes. Thirteen (62%) indicated they would rather work at a slow pace than work very quickly. Fifteen (75%) of those responding preferred oral expression of ideas rather than written expression. Fifteen (71%) indicated they would rather work at jobs requiring physical energy than those which require thinking. Thirteen (62%) students indicated they would rather do work where it is possible to stay neat and clean than work where one gets dirty.

Fourteen students (67%) indicated they would rather do one thing at a time than several tasks at the same time. Twelve students of 20 responding (60%) indicated they

would prefer to work with tools rather than numbers. Nineteen (90.5%) indicated they would rather work during th. day than at night. Of those responding, twelve (60%) students indicated a preference for a casual setting over a formal setting. Eleven (60%) indicated they would prefer to work with people rather than objects.

Of those responding, eleven (55%) indicated they would prefer to make something rather than to sell something. Eleven (52%) students indicated they would prefer others to plan tasks than to plan the tasks themselves. Fourteen (67%) students indicated they would prefer to have a job that requires a lot of training rather than a job that requires little training.

Career

The students were asked to respond in writing to 20 questions regarding a choice of career. Sixteen students completed the questions. Eleven (69%) indicated they had selected a career choice. Similarly, 11 (69%) indicated they had hobbies or experiences related to their career choice. However, fewer than half (44%) indicated personal characteristics they thought would help in the career choice. Three (19%) of the participants thought they knew about the necessary education and training requirements, and four (25%) of those responding to this question thought they knew about the cost of preparing for the career. Eight (50%) indicated they knew whether the career would meet their salary expectations, and five (31%) thought they knew how much money they would be making after five years. Four (25%) responded to the question regarding opportunities in the next ten years.

Eight (50%) indicated they thought their career choice would help them be surrounded by the kinds of persons they would prefer. Three (19%) said they knew about opportunities in their career choice, as compared to other choices. Six (37.5%) indicated they knew the training required to succeed or stay in their career choice and how the career might affect their personal lives.

Ten (62.5%) indicated they knew where work in their career choices would be located. Four (25%) indicated they knew what factors would help people succeed in their career choice, while seven (44%) indicated they knew what factors would cause persons to fail or be fired. Eight participants (50%) indicated what they would like about the working conditions, while the same number indicated what they would not like about the career. Ten (62.5%) indicated that their career choice would help accomplish their life goals. Three (19%) indicated they knew an organization that might help them find information about their career choice.

Vocational Interests (WRIOT)

Fourteen students were administered the WRIOT *Wide Range Interest-Opinion Test* (Jastak and Jastak, 1979) which addresses interests and work opinions, and attitudes toward specific work conditions. Of the 14 students tested, six were female and eight were male. The results of the testing were reported by gender. Students were asked to rate their level of interest in 18 work areas for the interest testing. Work conditions consisted of six categories. Interest levels were scored on a scale of very low to very high. Student interest levels were also rated from very low to very high.

Females. Data for the female students' vocational interests appear in Table 5. The highest levels of interest (at least two students in the high or very high interest range) were in *protective service*, *physical science*, *machine operation*, *mechanics*, and *art*. The lowest levels of interest (at least four students in the very low to below average range) were in *music*, *drama*, *social service*, and *outdoor* vocations. For *management*, *office work*, and *personal service*, the six female students were average or higher. In the areas of *social service* and *social science* all the female students were average or below average interest.

Table 5

WRIOT PROFILE: Vocational Interests Number of Female Students Scoring in Each Interest Range For Each Interest Area

Interest Area	Very Low 20-31	Low 32-37	Below Avg. 38-43	Avg. 44-56	Above Avg. 57-62	High 63-68	Very High 69-80
Physical Science				2	2	1	1
Protective Service			1		1		3
Machine Operation				3	1	1	1
Art		1		2		3	
Mechanics			1	3		1	1
Office Work				3	3		
Number				4	1	1	
Management				5		1	
Biological Science			2	1	2	1	
Literature			1	4		1	
Sales			1	4		1	
Personal Service				6			
Social Science			2	4			
Athletics		1	1	4			
Music	2		2	1	1		
Social Service	1		4	1			
Outdoor		3	2	1			
Drama	1	3	1	1			

In the areas of *physical science*, *number*, *mechanics*, and *machine operation* the six female students were in the average interest range or above, with the exception of one female student, who was below average in *mechanics*. The *machine operation* interest scores for the female students were nearly identical to those of *mechanics* with the exception of one student, who was in the above average interest range as opposed to the below average range. For the work interests of *outdoor* and *athletics*, all female students were in the average or below average interest ranges.

For work condition preferences (Table 6), a scale of very low to very high was used to rate interest in working in each particular condition. The conditions included *sedentariness*, *risk*, *ambition*, *chosen skill level*, *sex stereotype*, and *agreement*. Each condition was defined by the WRIOT as follows: *Sedentariness* was defined as jobs characterized by sitting in one place on the job. *Risk* was defined as jobs involving danger or risk. *Ambition* was defined as jobs that allow the person to improve himself or herself, or his or her status or income. *Chosen skill level* consisted of jobs in which the person works at his or her level of difficulty. *Sex stereotype* asked if a person preferred work formerly done by persons of his or her own sex. *Agreement* asked if a person's likes or dislikes in a job situation were strong or indefinite. Results were divided by gender.

For the work conditions of *ambition*, *chosen skill level*, *sex stereotype*, and *agreement* all female students were in the average or below average range. For *sex stereotype* and *agreement* two students each were in the average range, one each in the below average range, two in the low range for *sex stereotype*, one was low for *agreement*, one was in the very low range for *sex stereotype* and two very low in the *agreement* category.

Table 6

WRIOT Profile: Opinions and Attitudes Number of Female Students Scoring in Each Interest Range for Each Work Condition Preference

Work Preferences	Very Low 20-31	Low 32-37	Below Avg. 38-43	Avg. 44-56	Above Avg. 57-62	High 63-68	Very High 69-80
Sedentariness				2	2		2
Risk		1	2	2	1		
Ambition		2	3	1			
Chosen Skill Level	1		1	4			
Sex Stereotype	1	2	1	2			
Agreement	2	1	1	2			

Males. Vocational interests for the eight male students were assessed according to the scale of very low interest to very high interest. Results of the data for males' vocational interests are in Table 7. The highest levels of interest (at least five students showing above average to very high interest) were in *Biological Science*, *Personal Service*, and *Protective Service*. The lowest levels of interest (at least six students showing very low to below average interest) were in *Literature* and *Music* vocations.

Table 7

WRIOT Profile: Vocational Interests Number of Male Students Scoring in Each Interest Range For Each Interest Area

Interest	Very Low	Low	Below Avg.	Avg.	Above Avg.	High	Very High
Area	20-31	32-37	38-43	44-56	57-62	63-68	69-80
Biological Science				2	4	1	1
Protective Service				3	3	1	1
Personal Service				1	6	1	
Mechanics				5		3	
Outdoor			1	4	1	1	1
Physical Science				6	1		1
Machine Operation		1		4		3	
Athletics		1		3	3		1
Office Work		1	1	5	1		
Art			4	3	1		
Sales	2		1	3	1	1	
Social Service	2	3	1	2			
Social Science	3	1	3	1			
Drama	1	2		5			
Number		4	1	1	2		
Management	1	2	1	4			
Literature	2	2	2		2		
Music	3	3	1	1			

All male students were average or above average in the work interest of *protective service*. In contrast, the eight male students were average or below average in the work interest of *social service*. The rankings for *social science* were similar to those of *social service*. In *mechanics*, the eight students were in either the average or high ranges. Rankings in the area of *machine operation* were similar to those of *mechanics*. For *outdoor* and *athletics* the rankings were scattered.

Work condition preferences for males (Table 8) were assessed using the range of interest scale of very low to very high for each work condition. In general, the males expressed the most interest in vocations involving risk and in traditional male vocations (*sex stereotype*), in that at least three of the males expressed above average to very high interest in these vocations.

Table 8

WRIOT Profile: Opinions and Attitudes Number of Male Students Scoring in Each Interest Range for Each Work Condition Preference

Work	Very Low	Low	Below Avg.	Avg.	Above Avg.	High	Very High
Preferences	20-31	32-37	38-43	44-56	57-62	63-68	69-80
Risk		1	1	2	1	1	2
Sex Stereotype		1		4	2		1
Ambition		1		6	1		
Sedentariness		2	2	2	1	1	
Chosen Skill Level			6	1	1		
Agreement			6	2			

Teacher Assessments

A teacher from each of the four participating schools who was familiar with the American Indian students with learning disabilities in their school was asked to provide their assessments of the students they knew. Their assessments dealt with the attitudes and behavior of these students, as well as with their responsibility and self discipline.

Ratings of attitude and behavior. The teachers were asked to rate their students' attitudes and behaviors with respect to 20 items as : 1 (now and then), 2 (about half the time), 3 (most of the time), 4 (all of the time). Ratings were obtained for 19 students. The rating ranged from a low mean of 2.15 (*SD* = .898) for 'has initiative and ambition' to a high of 2.95 (*SD* = .705) for 'receptive to directions' and 'cheerful and happy'.

The rankings from highest to lowest follow: (1.5) 'receptive to directions' and 'cheerful and happy', (3) 'willing to share knowledge', (4.5) 'trust others' and 'honest and trustworthy', (6.25) 'applies self when given a task', 'willing to help others', 'accepts responsibility for actions', and 'fair in competitive situations', (8) 'has a cooperative attitude', (9) 'accepts criticism without pouting', (10.5) 'listens to others/appears to understand', and 'believes things can work out', (12.33) 'respects rights and feeling of others', 'concerned about dressing appropriately', and 'tries to be pleasant', (14) 'respects the value and need for rules', (15) 'expresses opinions and ideas', (16) 'desires to improve study or work skills', (17) 'has initiative and ambition'.

Responsibility and self discipline. The teachers rated students on 18 items concerning responsibility and self discipline. The behaviors were rated 1 (much improvement needed), 2 (could be improved), 3 (acceptable), or 4 (very good). The ratings ranged from a mean of 1.95 for 'remains at task when there are distractions' (*SD* = .85) and 'returns to work immediately' (*SD* = .97) to a mean of 3.26 (*SD* = .65) for 'keeps his or her word'.

The rankings from highest to lowest follow: (1) 'keeps his or her word', (2) 'can be trusted with money', (3) 'has a good attendance record', (4) 'practices good health habits', (5) 'dresses appropriately', (6) 'arrives at the right place at the right time', (7) 'exercises safety precautions', (8) 'can work without help of others', (9) tries to avoid keeping others from doing their work (10.33) 'accepts responsibility for learning', 'adjusts well to new methods and plans', and 'obtains and arranges materials' (12.33) 'works at a task until it is

completed', 'finishes work assignments on time', and 'willing to perform tasks even if it is difficult or unexpected', (14) 'checks work for accuracy', (16.5) 'remains at task when there are distractions' and 'returns to work immediately'.

College Students with Learning Disabilities

A group of adult American Indian students with learning disabilities were assessed using two instruments, the *Vocational Decision Making Interview* (VDMI) (Czerlinsky and McCray, 1986), and the *Microcomputer Evaluation and Screening Assessment* (MESA) (Valpar International, 1984). Results from the VDMI assessment will be described first. Results from the multifaceted MESA instrument are described in three sections: Physical, Vocational, and Educational Testing; DOT Profile; and Worker Trait Factors.

Vocational Decision Making

The Vocational Decision Making Interview (Czerlinsky and McCray, 1986) was administered to 11 American Indian adults with learning disabilities. Since there were few participants and also because the test was employed with a unique population, it was felt that attention should be devoted to the individual responses rather than the derived scores. Therefore, responses to each item were tallied, along with the percentage of students referring to that item. Response options were 'true', 'false', and 'not sure'. The interview includes three subscales: Decision-Making Readiness (22 items), Employment Readiness (13 items), and Self-Appraisal Scale (24 items).

Decision-Making Readiness. The adults with learning disabilities were asked whether there were specific jobs about which they had been thinking. Nine (82%) responded affirmatively, one (9%) negatively, and one (9%) gave a response of 'not sure'. When asked if they knew how much education or training they would need for the jobs they would like to do, the number and percentages of affirmative, negative, and not sure responses were nine (82%), one (9%), and one (9%) respectively. Five (45%) adult

respondents knew how much experience was necessary for desired jobs, one (9%) did not, and five (45%) were not sure.

When asked if they had enough information about opportunities offered by and requirements of different jobs, four to five (36 - 45%) respondents replied affirmatively, two to three (18 - 27%) responded negatively, and four (36%) were not sure. Seven students (64%) understood the responsibilities or duties common to all jobs, while four (36%) did not know and none were unsure. When asked if they knew what kinds of tasks they would be doing on jobs they had thought about, 11 (100%) responded that they did. Six (55%) knew what responsibilities or duties they would have on jobs they had been thinking about, five (45%) were not sure, and none of the respondents answered negatively.

Questions asked of the adults with learning disabilities included those of other jobs and job factors. Seven adults (64%) had some knowledge about different jobs to help them make job decisions, two (18%) did not, and two (18%) were not sure. Eight (73%) named rewards and good things about some jobs, two (18%) did not, and one (9%) was not sure. All 11 adults responded affirmatively when asked if they could name aspects they would not like about some jobs. Adults also identified benefits of jobs they would consider and had information about the advantages of these jobs. Seven (nearly 70%) each responded affirmatively regarding the benefits and advantages, two to three (18 - 27%) responded negatively, and one (nearly 10%) was not sure. When asked about disadvantages of jobs that might influence their decisions, where to obtain information about jobs, who to talk to, and how to find out what jobs they would like to do, eight (73%) adults answered affirmatively to each question, two (18%) answered negatively to each question, with the exception of one (9%) answering negatively about knowing how to find out what jobs they would like to do. One (9%) adult responded that he or she was not sure about each

question with the exception of two (18%) who were not sure about how to find out about jobs they would like to do.

To conclude, the Decision Making Readiness part of the interview, adults were asked about sources of information for selection of a job choice, jobs that interested them and in which they could do well, the steps to be taken when deciding about a job, knowledge and process of narrowing job choices when several are under considerations, and finally if they had sufficient information to choose a job on their own. A majority of the adults responded affirmatively that they had knowledge about each question, with eight to ten (73 - 91%) responding true, zero or one adult (9%) responded negatively to each question, and one to two adults (9 - 18%) were not sure about each question.

Employment Readiness. On this part of the interview, adults' responses were more varied. When asked if they knew what kind of job they would like to have, seven (70%) knew, none of the students responded negatively, and three (30%) responded they were not sure. Similarly, when asked if they knew what type of work or career in which they would be interested for the rest of their lives, six (67%) responded positively, none responded negatively, and three (33%) responded they were not sure.

However, when asked if they would take any job, one (10%) indicated willingness to do so, eight (80%) responded they would not, and one (10%) was not sure. Five (50%) of those responding replied that they would take a job which their families or friends might not approve, two (20%) would not, and three (30%) were not sure.

All of those responding (10) said they would not let others decide which jobs they should take to avoid criticism. Seven (70%) of those responding said they would not worry about letting others down by taking a job they would not approve of, one (10%) would be concerned, and two (20%) were not sure. Students were asked whether or not their friends or families encourage them to look for a job. One (10%) responded that his/her family did not encourage him/her to look for work. Eight (80%) responded that

their family was encouraging, and one (10%) was not sure. A majority, nine (90%) of the respondents, replied positively that their friends or families would be proud of them if they got a job, while none of the respondents relied negatively to that question, and one (10%) replied he/she was not sure.

Seven (70%) of the respondents replied positively that the type of job they would get would not pay enough to make it worth their while, three responded negatively, and none were unsure. Nine (90%) of those responding said that money was one of the reasons to look for a job, one (10%) said it was not, and none were unsure. Respondents answered the same when asked if they would move to another place for a job, and if they could find a way to get to and from work no matter where they lived. Eight (80%) respondents replied positively, one (10%) negatively and one (10%) was not sure. Finally, respondents were asked if they were limited in their job choices due to difficulty with mobility. One (10%) replied that his/her job choices would be limited due to difficulty, eight (80%) replied negatively to that question, and one (10%) was not sure.

Self-Appraisal. The third part of the interview was Self-Appraisal. The adults were asked if they knew how much money they would need to earn from a job. Six (60%) knew, one (10%) did not, and three (30%) were not sure. Further, respondents were asked if they had a preference for the part of the town, state, or country where they would take a job. They were asked types of work they would not accept even if they made a lot of money and if they knew enough about their own personal needs to decide about jobs. They were asked if there were jobs they would not take due to their own personal beliefs and if they knew enough about their own interests to help them decide about jobs. They were asked if they knew what kinds of work they are good at doing and if they would also know what they would be good at with more training. They were asked if they knew how their disability limits the kinds of work they can do, and if they knew enough about their abilities to help them decide about jobs. The majority of respondents replied positively to

each question with the number of positive responses ranging from nine to ten (82 - 91%), negative responses ranged from zero to two (0 - 18%). Respondents who indicated not sure ranged from zero to two (0 - 18%). Students were asked if they frequently changed their opinions of themselves. Two (18%) replied that they do, while eight (73%) replied they do not, and one (9%) was not sure.

A majority of the respondents replied positively that they could describe themselves and their own personalities accurately and knew what kinds of lives they wanted for themselves, knew enough about themselves and their personalities to help them decide about jobs, had made decisions about whether to take jobs or not, and felt OK about the decisions they had made about jobs. The numbers of respondents answering positively to those questions ranged from eight to ten (73 - 91%), while those responding negatively ranged from one to two (9 - 18%), and those unsure ranged from zero to one (0 - 9%). Two (18%) of the respondents considered it an unpleasant task to make decisions about jobs, eight (73%) responded it was not unpleasant, and one (9%) was not sure. Four (36%) of the respondents replied that others had often disagreed with their decisions about jobs, seven (64%) replied conversely, and none were unsure. Three (27%) respondents believed that a job will come along no matter what they do, seven (64%) did not believe that, and one (9%) was unsure.

All the respondents said it was untrue that they let others decide which jobs were best for them and that it was also untrue that they became upset when they had to make decisions about jobs. Nine (82%), a majority, said it was untrue that they would rather let things happen by themselves than having to make a choice about a job. However, two (18%) respondents replied that it was true and none were unsure. Finally, nine (82%) respondents felt confident and sure of themselves when they had to make decisions about jobs, none responded negatively to this question, and two (18%) were unsure.

Overall, the respondents indicated a positive attitude about their job readiness, job-seeking skills, and their appraisals of themselves. Few respondents indicated a "wait and see" attitude about the job search and through their responses seemed ready and willing to take on the challenge from a realistic point of view.

MESA Physical, Vocational, and Educational Testing

Eleven students identified with learning disabilities at Salish Kootenai College were administered the MESA evaluation. Results from the MESA Screening Evaluation assessed the students on: (a) academic skills, (b) perceptual/neurological abilities, (c) manual dexterity which included motor coordination and tool use, (d) finger dexterity which included fine assembly, (e) physical capacities in strength and general mobility, (f) general ability, (g) vocational interest areas, (h) vocational interest factors, and (i) vocational awareness. Test results were available and analyzed for 10 of the 11 students. Because of the small sample size, the data can not be generalized. These scores are *norm-based*, and are therefore of uncertain reliability because norms for American Indian students are not available.

Academic skills. Students were tested for academic skill levels in the areas of mathematics, vocabulary, spelling, and reading. Each level represented a grade in school ranging from fourth grade to grade 14 (beyond high school). The results are summarized in Table 9.

Table 9

Academic Levels of Ten College Students by Grade and Subject

Grade Level	Mathematics *n* (%)	Vocabulary *n* (%)	Spelling *n* (%)	Reading *n* (%)
4	4(40%)			1(10%)
5	3(30%)	2(20%)	2(20%)	
6	1(10%)		2(20%)	2(20%)
7	2(20%)	1(10%)	1(10%)	
8			2(20%)	1(10%)
9		1(10%)	1(10%)	
10		6(60%)	2(20%)	1(10%)
11				
12				4(40%)
13				
14				1(10%)

Perceptual/Neurological Tests. Students were tested in the areas of vision screening, size discrimination, shape discrimination, eye-hand coordination, eye-hand-foot coordination, and color discrimination. With the exception of color discrimination, the results are in Table 10. When students were tested for color discrimination on a scale from low to high, all of the students scored in either the high average range (3, 30%) or in the high range (7, 70%).

Table 10

Students' Perceptual/Neurological Percentiles (n = 10)

Percentile	Vision	Size	Shape	Eye-Hand	Eye-Hand-Foot
	n (%)	*n* (%)	*n* (%)	*n* (%)	*n* (%)
95	10(100%)	8(80%)	7(70%)	8(80%)	2(20%)
90			1(10%)		1(10%)
85			1(10%)	1(10%)	
80					
75				1(10%)	
70		1(10%)			
65					1(10%)
60		1(10%)			
55					
50					1(10%)
45					
40					
35					
30					
25					
20					
15					
10					
5			1(10%)		5(50%)

Manual dexterity. Students were tested for manual dexterity which included motor coordination and tool use. Areas of testing were block assembly, hammering, alignment driving, block disassembly, wobble board (bolts), and machine tending. The results, showing a large amount of variability, are shown in Table 11.

Table 11

Students' Percentiles Scores in Manual Dexterity (n = 10)

Percentile	Block Assembly	Hammering	Alignment/ Driving	Block Disassembly	Wobble Board	Machine Tending
95	7(70%)	3(30%)	2(20%)		5(50%)	2(20%)
90				3(30%)		
85			3(30%)			2(20%)
80		3(30%)				1(10%)
75				2(20%)		
70	1(10%)			2(20%)		
65		1(10%)	3(30%)	1(10%)		
60						
55						
50						1(10%)
45	1(10%)					
40					1(10%)	
35						
30				1(10%)		
25						1(10%)
20				1(10%)	1(10%)	
15						
10		1(10%)	1(10%)		1(10%)	
5	1(10%)	2(20%)	1(10%)		2(20%)	3(30%)

Finger dexterity. Students were tested in the area of finger dexterity which included fine assembly. They were tested with the use of a wobble board with screws. They were tested for fine finger use with their dominant hands and their non-dominant hands and for wiring capabilities. The results, which range from the 5th to the 95th percentile, are shown in Table 12.

Table 12

Students' Percentile Scores of Finger Dexterity (n = 10)

Percentile	Wobble Board n (%)	Fine Finger Dominant n (%)	Fine Finger Non-Dominant n (%)	Wiring n (%)
95	5(50%)	3(30%)	2(20%)	
90	1(10%)	2(20%)	2(20%)	
85				1(10%)
80		1(10%)		
75			3(30%)	
70		2(20%)		
65			1(10%)	
60	1(10%)		1(10%)	1(10%)
55				
50	1(10%)	1(10%)		
45				
40	1(10%)			
35				
30				2(20%)
25				
20				2(20%)
15				
10				2(20%)
5	1(10%)	1(10%)	1(10%)	2(20%)

Physical capacities. Physical capacities were tested for all students participating in the MESA test. Capacities were divided into two areas, strength and general mobility. In the area of strength, students were tested for lifting, hand grip, palm press, horizontal press, and vertical press capabilities. The students' physical capacities were measured in pounds. The mean, standard deviation, and 95% confidence limits were calculated. As anticipated, there was great variability. The results are shown in Table 13.

Table 13

Students' Physical Capacities Measured in Pounds

Activity	Mean	*SD*
Lifting	51.0	24.4
Hand Grip	71.1	19.0
Palm Press	47.5	21.8
Horizontal Press	66.5	33.6
Vertical Press	60.5	29.8

In the area of General Mobility, students were tested for the abilities of walking forward, walking backward, heel/toe, walk/toe, walk/heel, balance right, balance left, squatting, climbing, kneeling, crawling, stooping, and crouching. The results, showing that more than half of the students could perform the tasks, were tallied and displayed in Table 14.

Table 14

Students' General Mobility Capacities: Number and Percentage of Students with Each Ability (n = 10)

Mobility Activity	Yes *n* (%)	No *n* (%)
Walk Forward	10 (100%)	0
Walk Backward	10 (100%)	0
Heel/Toe	9 (90%)	1 (10%)
Walk/Toe	10 (100%)	0
Walk/Heel	10 (100%)	0
Balance Right	10 (100%)	0
Balance Left	9 (90%)	1 (10%)
Squat	8 (80%)	2 (20%)
Climbing	10 (100%)	0
Kneeling	7 (70%)	3 (30%)
Crawling	7 (70%)	3 (30%)
Stooping	6 (60%)	4 (40%)
Crouching	6 (60%)	4 (40%)

General abilities. Students' general abilities were tested in the areas of problem solving, visual memory, reasoning, instruction following, talking/persuasive, and independent perceptual abilities. All of the scores available were in the high category on Talking/Persuasive. In Visual Memory, the students were rated either average or high average. In Following Instructions, the students ranged from low to the mode (5) of high average. For Independent Perceptual Abilities, the range was from low average to high. Problem Solving scores were bimodel, with most students scoring either low or high. The results are shown in Table 15.

Table 15

Students' General Abilities (n = 10)

General Ability	Low	Low Average	Average	High Average	High
Problem Solving	4(40%)	1(10%)	1(10%)	4(40%)	0
Visual Memory	0	0	3(30%)	7(70%)	0
Reasoning	0	1(10%)	5(50%)	4(40%)	0
Instruction Following	2(20%)	2(20%)	1(10%)	5(50%)	0
Talking/Persuasive	0	0	0	0	9(90%)
Independent Perceptual	0	2(20%)	1(10%)	3(30%)	4(40%)

Vocational interests. Vocational interest was assessed in 12 different areas of interest: leading/influencing, scientific, industrial-support, humanitarian, protective, industrial-production, selling, sports, mechanical, accommodating, artistic, plant/animal. As expected, there was a wide range of areas of interest. The highest levels of interest (at least 40% scoring high average or high) were in Leading/Influencing, Scientific, and Industrial Support. Students' interests are shown in Table 16.

Table 16

Students' Vocational Interests from Low to High Interest (n = 10)

Vocational Interest	Low n (%)	Low Average n (%)	Average n (%)	High Average n (%)	High n (%)
Leading/Influencing	0	0	3(30%)	5(50%)	2(20%)
Scientific	0	2(20%)	3(30%)	4(40%)	1(10%)
Industrial-Support	0	0	6(60%)	4(40%)	0
Humanitarian	0	2(20%)	5(50%)	3(30%)	0
Plants/Animals	0	3(30%)	5(50%)	1(10%)	1(10%)
Protective	0	2(20%)	6(60%)	2(20%)	0
Industrial-Production	0	2(20%)	6(60%)	2(20%)	0
Selling	1(10%)	0	7(70%)	2(20%)	0
Mechanical	0	1(10%)	9(90%)	0	0
Accommodating	0	4(40%)	5(50%)	1(10%)	0
Sports	1(10%)	4(40%)	4(40%)	0	1(10%)
Artistic	1(10%)	5(50%)	3(30%)	1(10%)	0

Ten vocational interest factors were assessed for all students. They showed a special liking for work that: (a) deals with things and objects; (b) deals with the communication of data; (c) involves business contact with people; (d) is scientific and technical; (e) is of a routine, specific, organized nature; (f) is of an abstract and creative nature; (g) is thought to be for the good of people; (h) is related to machines, techniques, and processes; (i) gives you prestige or the esteem of others; and (j) provides tangible results which give you satisfaction.

The results were tallied, indicating students' first, second, and third choice areas, and placed in Table 17. The modal first choice (seven students, 70%) in the Good of People was the most popular choice by far. Four students (40%) chose Business Contact with People for their second choice. The third area most often chosen was Prestige or Esteem of

Others, which was chosen by four students (40%) as their first, second, or third choice. All other interest factors were chosen by no more than three students.

Table 17

Students' Vocational Interest Factors: Numbers and Percentages of Students Choosing Each Vocational Area (n = 10)

Vocational Areas	First Choice n (%)	Second Choice n (%)	Third Choice n (%)
Good of People	7(70%)	1(10%)	1(10%)
Business Contact with People	1(10%)	4(40%)	0
Prestige or the Esteem of Others	1(10%)	1(10%)	2(20%)
Tangible Results and Satisfaction	0	1(10%)	2(20%)
Things and Objects	1(10%)	0	0
Scientific and Technical	0	1(10%)	1(10%)
Communication of Data	0	0	3(30%)
Abstract and Creative	0	1(10%)	0
Machines, Techniques, and Processes	0	1(10%)	0
Routine, Specific, Organized	0	0	1(10%)

Vocational Awareness. Students' vocational awareness was assessed and ranked on a scale from low to high. The range was from average to high with most (6) in the high average category. The results are shown in Table 18.

Table 18

Students' Vocational Awareness from Low to High (N = 10)

Level of Awareness	Count *n* (%)
Low	0
Low Average	0
Average	1(10%)
High Average	6(60%)
High	3(30%)

MESA DOT Profile (Worker Functions)

Students' MESA subtest scores were also analyzed using the Worker Profile Analysis. The scores were analyzed in their relation to the *Dictionary of Occupational Titles* worker functions of Data, People, and Things, and to worker trait factors of physical demands, work conditions, General Educational Development (GED), specific vocational preparation, aptitudes, characteristics, and temperaments. These results are *criterion-based* and are therefore probably more reliable than the norm-based results in the first part of the assessment.

The number of percentages of students scores in each of the areas of the DOT Profile follow. Each area is accompanied with a table. The DOT Profile Analysis analyzed the subtest scores for all of the 11 students completing the MESA Evaluation. The first area of analysis was categorized as Worker Functions which correspond to the last three digits of the DOT code. The performance of students was assessed by skill level in each of three areas, working with data, people, or things. Each area was then broken down into functions associated with that particular area.

Data Functions. Skills for data functions included synthesizing (most complex), coordinating, analyzing, compiling, computing, copying, and comparing (least complex). The results of students' Data functions are shown in Table 19.

Table 19

Students' Worker Functions Levels of Performance: Working with Data Including Numbers, Symbols, Ideas, and Concepts (n = 11)

Data Functions	Function Number	Student Count n (%)
Synthesizing	0	0
Coordinating	1	0
Analyzing	2	1(9%)
Compiling	3	5(45.5%)
Computing	4	1(9%)
Copying	5	2(18%)
Comparing	6	2(18%)

Of the seven functions used for working with data, compiling data was the function more students showed strength in than any other function. Five (45.5%) students showed strength in compiling data. One (9%) student showed strength in analyzing data, one (9%) student showed strength in computing, and two (18%) students each showed strength in copying and comparing data.

People Functions. Functions for working with people included mentoring (most complex), negotiating, instructing, supervising, diverting, persuading, speaking/signaling, serving, and taking instructions/helping (least complex). Results of students' People Functions appear in Table 20. Four (40%) students showed skill levels consistent with diverting, a people skill meaning to amuse others. Three (30%) students each showed skill levels consistent with instructing and taking instruction/helping.

Table 20

Students' Worker Functions Levels of Performance: Working with People (n = 10)

People Functions	Function Number	Student Count n (%)
Mentoring	0	0
Negotiating	1	0
Instructing	2	3(30%)
Supervising	3	0
Diverting	4	4(40%)
Persuading	5	0
Speaking/Signaling	6	0
Serving	7	0
Taking Instructions/Helping	8	3(30%)

Things Functions. Functions for working with things (i.e. machinery, equipment, etc.) included setting up (most complex), precision working, operating/controlling, driving/operating, manipulating, tending, feeding/offbearing, and handling (least complex). Results of students' Things functions are shown in Table 21. A majority of students (6, 55%) listed handling as the level of performance most suitable for them in functions associated with things.

Table 21

Students' Worker Functions Levels of Performance: Working with Things Including Machines, Tools, and Equipment (n = 11)

Things Functions	Function Number	Count n (%)
Setting Up	0	0
Precision Working	1	0
Operating/Controlling	2	0
Driving/Operating	3	0
Manipulating	4	3(27%)
Tending	5	0
Feeding/Offbearing	6	2(18%)
Handling	7	6(55%)

Worker Trait Factors

These results, from the MESA Worker Profile Analysis, use criterion-based scores for many of the same topics as the Screening Evaluation, which is norm-based, and are therefore probably more useful for this population.

Physical Demands. Physical demands were analyzed in the areas of strength, climbing/balancing, stooping/kneeling/crouching/crawling, reaching/handling/fingering/feeling, talking/hearing, and seeing. Physical demands pertain to the student's physical capacity to do work. Work conditions conducive for each student were also analyzed. They included inside, outside extreme cold, extreme heat, wet or humid conditions, noise and/or vibrations, hazards, and atmospheric conditions. Results of students' strength capabilities are tabulated in Table 22, measured in levels of work varying from sedentary to very heavy work.

Table 22

Students' Physical Demands Capacities Strength Levels (n = 11)

Degree of Strength	Count n (%)
Sedentary Work	1(9%)
Light Work	2(18%)
Medium Work	6(55%)
Heavy Work	1(9%)
Very Heavy Work	1(9%)

Work Conditions. Other physical demands and work conditions are shown in Table 23. Since they were measured in terms of ability or tolerance, they were tallied as either "yes" or "no" for each demand or work condition. The number and percentages of students able to meet the work demand or able to work in a particular condition are shown.

Table 23

Students' Abilities and Preferences Responses Regarding Physical Demands and Work Conditions (n = 11)

Demand or Condition	Yes n (%)	No n(%)
Atmospheric Conditions	2(18%)	9(82%)
Extreme Cold	2(20%)	8(80%)
Wet and/or Humid	2(22%)	7(78%)
Noise and/or Vibrations	3(27%)	8(73%)
Hazards	3(27%)	8(73%)
Extreme Heat	4(36%)	7(64%)
Stooping, Kneeling, Crouching, Crawling	5(45.5%)	6(55%)
Inside	7(64%)	4(36%)
Outside	7(64%)	4(36%)
Climbing/Balancing	8(73%)	3(27%)
Reaching, Handling, Fingering, Feeling	8(73%)	3(27%)
Talking/Hearing	10(100%)	0
Seeing	11(100%)	0

GED. Students' levels of General Education Development (GED) were analyzed according to their subtest scores on the MESA Evaluation. They were assessed in the areas of reasoning, mathematics, and language. Six levels of development were used to characterize the results. The results are shown in Table 24. A majority of students showed a common sense understanding of reasoning, mathematics, and language to be more descriptive of their development than any other.

Table 24

Students' Levels of General Education Development in the Areas of Reasoning, Mathematics and Language (n = 11)

Level of Development	Student Count Reasoning n (%)	Student Count Mathematics n (%)	Student Count Language n (%)
1-Commonsense Understanding with Simple Instructions	0	0	0
2-Commonsense Understanding with Detailed but Uninvolved Written or Oral Instructions	3(27%)	4(36%)	2(18%)
3-Commonsense Understanding with Written, Oral, or Diagrammatic Forms of Instruction	5(45.5%)	6(55%)	4(36%)
4-Apply Principles of Rational Systems	3(27%)	0	5(45.5%)
5-Apply Principles of Logical or Scientific Thinking to Define Problems	0	1(9%)	0
6-Apply Principles of Logical or Scientific Thinking to a Wide Range of Intellectual and Practical Problems	0	0	0

Vocational Preparation. Specific vocational preparation levels were determined for all students' vocational interest areas. Levels of preparation varied from short demonstration to over 10 years. All nine levels of preparation were examined. The results are shown in Table 25.

Table 25

Students' Determined Specific Vocational Preparation Levels for Careers Chosen (n = 11)

Level	Number of Students Responding to Level n (%)
1-Short demonstration only	0
2-Anything beyond short demonstration, up to and including 30 days	0
3-Over 30 days, up to and including 6 months	0
4-Over 3 months, up to and including 6 months	1(9%)
5-Over 6 months, up to and including 1 year	0
6-Over 1 year, up to and including 2 years	0
7-Over 2 years, up to and including 4 years	7(64%)
8-Over 4 years, up to and including 10 years	3(27%)
9-Over 10 years	0

Aptitude Levels. Student's aptitude levels for facilitation of learning of tasks and job duties were analyzed. The results were categorized on a scale of 1 (high) to 5 (low). Aptitudes included intelligence, verbal, numerical, spatial, form perception, clerical perception, motor coordination, finger dexterity, manual dexterity, eye-hand-foot coordination, and color discrimination. Students' scores did not fall in either the one or the five rating for any aptitude. All eleven of the students were rated level 2 (moderately high) on color discrimination. Seven of them (64%) scored just as high on spatial perception. The results are shown in Table 26.

Table 26

Students' Aptitudes Levels Facilitating Learning of Tasks and Job Duties Level 1 is High, Level 5 is Low (n = 11)

Aptitude	Level 1 n (%)	Level 2 n (%)	Level 3 n (%)	Level 4 n (%)	Level 5 n (%)
Intelligence	0	0	6(55%)	5(45.5%)	0
Verbal	0	3(27%)	4(36%)	4(36%)	0
Numerical	0	1(9%)	3(27%)	7(64%)	0
Spatial	0	7(64%)	2(18%)	2(18%)	0
Form Perception	0	1(9%)	3(27%)	7(64%)	0
Clerical Perception	0	1(9%)	5(45.5%)	5(45.5%)	0
Motor Coordination	0	0	8(73%)	3(27%)	0
Finger Dexterity	0	1(9%)	7(64%)	3(27%)	0
Manual Dexterity	0	3(27%)	2(18%)	6(55%)	0
Eye-Hand-Foot Coord.	0	3(27%)	2(18%)	6(55%)	0
Color Discrimination	0	11(100%)	0	0	0

Additional Worker Characteristics. Additional worker characteristics, important for job success, were assessed. They included Instruction Following and Vocational Awareness. Students were scored on a scale of two (low) to four (high). Eight of the students were rated low on Vocational Awareness. Half were rated high and half were rated low on Instruction Following. The results are shown in Table 27.

Table 27

Students' Additional Worker Characteristics Important for Job Success Level 2 is High, Level 4 is Low (n = 10)

Characteristic	Level 2 (Low)	Level 3	Level 4 (High)
Instruction Following	5(50%)	0	5(50%)
Vocational Awareness	8(80%)	2(20%)	0

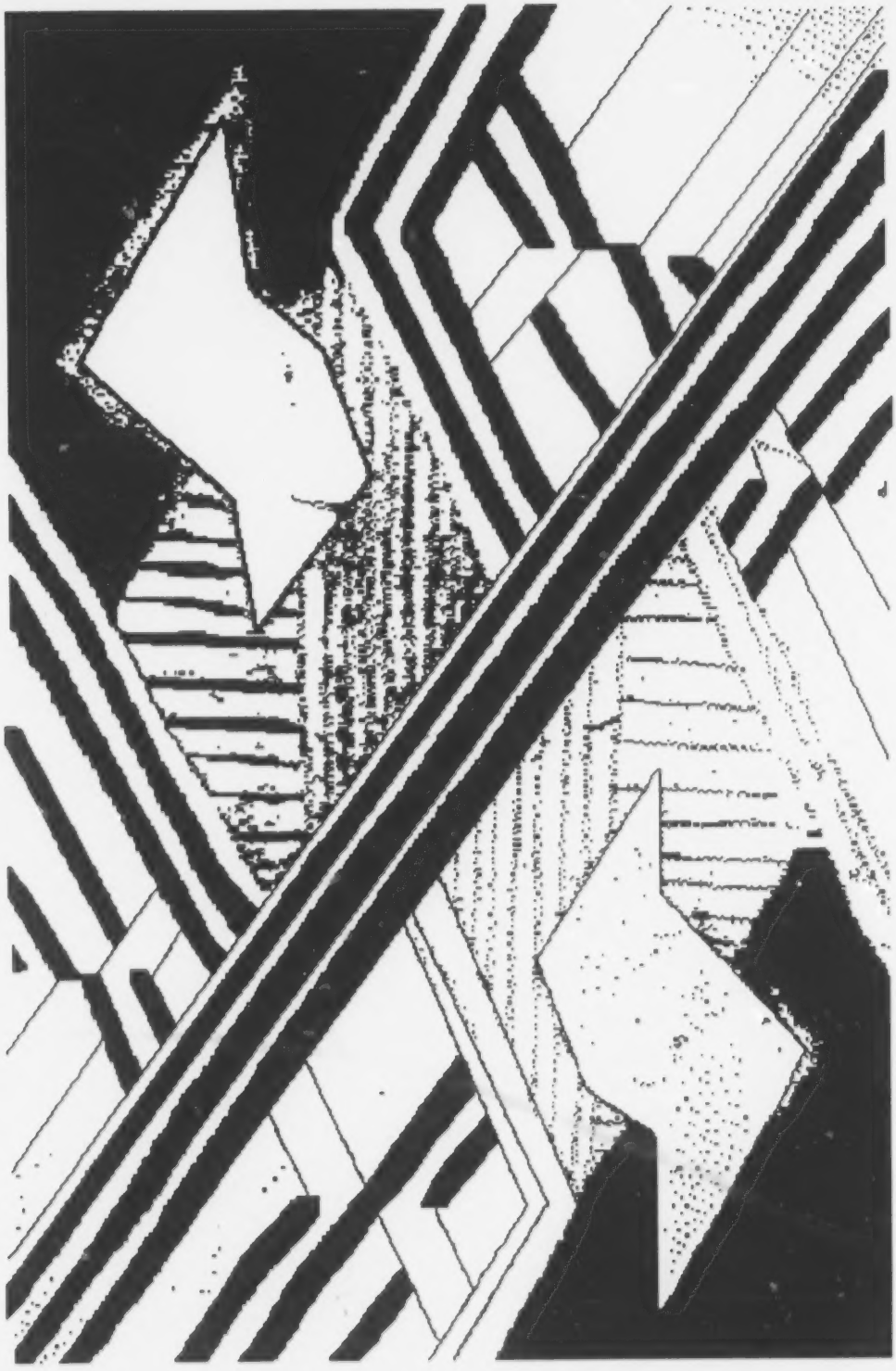
Temperaments. Students' temperaments allowing adaptability for specific types of job/worker situations were assessed. Students were asked to list temperaments appropriate for them in order of strength, as each pertained to them. Not all students listed the same number of temperaments, listing only those that applied to them. Temperaments included adaptability to: (a) accepting responsibility for the direction, control, or planning of an activity; (b) situations involving the interpretation of feelings, ideas, or facts in terms of personal viewpoint; (c) influencing people in their opinions, attitudes, or judgements about ideas or things; (d) making generalizations, evaluation, or decisions based on sensory or judgmental criteria; (e) making generalizations, judgements, or decisions based on measurable or verifiable criteria; (g) performing repetitive work, or continuously performing the same work, according to set procedures, sequence, or pace; (h) performing under stress when confronted with emergency, critical, unusual, or dangerous situations; or in situations in which working speed and sustained attention are make or break aspects of the job; (i) situations requiring the precise attainment of set limits, tolerances, or standards; and (j) performing a variety of duties, often changing from one task to another of a different nature without loss of efficiency or composure.

For the temperament requiring acceptance of responsibility for the direction, control, or planning of an activity, three (33%) of the students listed it as their primary strength. Six (67%) listed the temperament requiring adaptability to situations involving the interpretations of feelings, ideas, or facts in terms of personal viewpoint as their primary strength, while three (33%) listed the same temperament as their secondary strength. Six (67%) listed the temperament requiring dealing with people beyond giving and receiving instructions as their second strength.

For their third strength, one (17%) of the students listed the temperament requiring making generalizations, judgements, or decisions based on sensory or judgmental criteria, two (33%) listed the temperament requiring dealing with people beyond giving and

receiving instructions, one (17%) listed the temperament requiring performing repetitive work, or continuously performing the same work, according to set procedures, sequence, or pace, and two (33%) responded with the temperament requiring performing a variety of duties, often changing from one task to another of a different nature without the loss of efficiency or composure.

One of the two students, responding to the fourth choice of temperament, listed the temperament requiring dealing with people beyond giving and receiving of instructions as his/her fourth strength and one of the two responding to a fifth temperament choice listed the temperament requiring performing a variety of duties, often changing from one task to another of a different nature without the loss of efficiency or composure as their fourth strength. Only one student listed the temperament requiring performing the same work, according to set procedures, sequence, or pace as his/her fifth strength and only one student listed the temperament requiring performing under stress when confronted with emergency, critical, unusual, or dangerous situations; or in situations in which working speed and sustained attention are make or break aspects of the job as his/her sixth strength. No adults with learning disabilities displayed the temperaments requiring influencing people in their opinions, attitudes, or judgements about ideas or things; making generalizations, judgements, or decisions based on measurable or verifiable criteria; or adaptability to situations requiring the precise attainment of set limits, tolerances, or standards.



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SUMMARY AND DISCUSSION

A preliminary investigation of the vocational readiness of American Indian adolescents with learning disabilities was conducted. It included a study of the ways in which American Indian students are identified with learning disabilities. Specific job skills, vocational decision making, physical and academic levels, and career knowledge were assessed, and post-secondary services were identified. Recommendations were made for preparation of school psychologists and for including vocational guidance and preparation in the curriculum.

Psychologists

The results of this study indicate that these psychologists have recognized that the use of standard testing tools with American Indian children requires adaptations and clinical judgement. Many of these adaptations appear to be based on extensive experience with American Indian children, and on sensitivity to issues relating to culture, language, and family systems. Given the variability between reservations and American Indian groups in Montana, it is not surprising that a variety of ways of modifying testing procedures was reported. The proportion of school psychologists in Montana, and presumable elsewhere, who report having American Indian persons among their clientele, suggests the need for all professional personnel to know about multicultural assessment issues.

Vocational Skills

The sample for this study was small. Furthermore, the variability among American Indian tribes and entities throughout the United States and Alaska defies any attempt to generalize results. The data from this study, however, help to identify issues to be addressed in further research.

High School Students. To summarize the results of the data collected from the high school age students identified with learning disabilities, they generally did not have strategies for seeking jobs, nor did they identify strategies for remembering important

content. While some other students possessed skills for use in job seeking or keeping a job (e.g., use of telephone book yellow pages or reading help wanted advertisements), many specific skills were lacking. When they were asked about a career choice, many did not have one. Additionally, while not addressed quantitatively, they did not show evidence of familiarity with a wide array of jobs. Similarly, they frequently did not possess estimates of either preparation time or the cost of job training.

Despite the recognized lack of assessment tools developed specifically for American Indian groups, an attempt was make to assess vocational interests and abilities. For example, the *WRIOT* which does not require reading ability, can be employed to help explore vocational interests. The *VDMI* was successfully employed, although because a learning disability is hidden, examiners report that students with learning disabilities did not respond well to the question dealing with their disability. Additionally, because of the lack of appropriate norms and inappropriate use of derived scores, criterion-referenced assessment tools seem best suited for use with American Indian students with learning disabilities.

College Students. The data collected from the post-secondary school age students evaluated through use of the Vocational Decision Making Interview (VDMI) and the MESA test battery indicate that those tools can provide useful information for this population. The VDMI data showed that most students were able and decisive in regard to career decisions. Students did not wish others to make decisions about their careers, but some reported that family members were an influence on their choices.

Students taking the MESA test battery showed a predictable variability in all areas. However, a majority of the students reported adequate physical abilities (as shown in Tables 10-14, and 22) including perceptual/neurological ability, dexterity, and strength. For most students' (six; 60%), the most interesting results were in the following areas: Students showed academic skill levels at a 10th grade level for vocabulary skills.

Questions regarding Vocational Interests Factors revealed that seven (70%) of the students chose working for the good of people as their first vocational interest area. Six (60%) of the students showed a high average vocational awareness level, and six (55%) of the respondents chose Handling as the worker function most appropriate for them with respect to Things. A majority of students determined that at least two years and up to four years would be necessary for their career preparation. Finally, eight (80%) of the students showed a high vocational awareness level.

Discussion

Psychologists' Use of Tests and Procedures. The disagreement within special education, in regard to the definition of learning disabilities, creates difficulties for practitioners. The NJCLD definition, which could incorporate the concerns of the Interagency Committee on Learning Disabilities, appears to be most acceptable to professional persons. It would be helpful if the issue could be resolved so energies can be spent on other concerns. Similarly, the disagreements about a standard way to determine a discrepancy between ability and achievement have been a deterrent to professional progress.

While it has been recognized that there is no appropriate test of ability for all American Indian groups, the mandate for determining the discrepancy between ability and achievement dictates that the issue must be addressed. If the issue is not recognized, American Indian children might be over identified or, just as devastating, they might be under identified and would fail to receive services other children receive and to which American Indian children with learning disabilities are entitled.

Certainly, there is a need for American Indian persons to be prepared as psychologists. While this study did not address the development of culture-fair or culture-specific tests for American Indian persons, the investigators believe there is greater and more immediate payoff for emphasizing diverse cultures and acceptance of diverse cultures

than trying to create new and varied tests of ability for comparatively small population groups.

Vocational Readiness (VDMI). Because of the small sample size and the variability of American Indian groups throughout the United States and Alaska, the results defy generalization. These data should be employed as a source of questions to generate further research.

The American Indian students identified with learning disabilities generally did not respond to the question about how they would find a job with a particular strategy; nor did they generally respond with an appropriate strategy for remembering information. These findings are similar to reports of non-Indian adolescents with learning disabilities who lack strategies or approaches for complex tasks. Those studies of primarily non-Indian students have supported the need for the development of strategies for accomplishing particular tasks and directly teaching those specific strategies to the students. The present results support the need for research to determine the effectiveness of strategy instruction with American Indian students.

While students were variable in their possession of specific skills which enable them to locate jobs (e.g., use of telephone book yellow pages or reading help wanted advertisements), some lacked specific skills. When they were asked about a career choice, a high proportion did not have one. Additionally, while not addressed systematically or quantitatively, there was a lack of familiarity with a wide array of jobs. Similarly, some did not possess accurate information about preparation time or the cost of job training. These results are not surprising due to the high rate of unemployment, the lack of role models for a wide variety of jobs, and limited career development programs in high schools.

Physical Capabilities and Vocational Interests (MESA). Students at the college level showed a variety of physical and academic levels of functioning. Vocational interests were

highest in leading/influencing, scientific, and industrial support while a majority of the students showed an average interest in protective, industrial production, selling, and mechanical types of jobs. A majority showed an interest in the 'Good of People' as a factor in career choice. A majority displayed an above average level of vocational awareness and a variation in their levels of performance in working with data, people, and things. As might be expected, most students preferred to work in amiable conditions free of extreme temperature variation. Most students reported being willing to commit to over two years and up to ten years of time to their chosen vocational preparation.

Recommendations

Psychologists. It is recommended that school psychologists be prepared to address the needs of people from culturally diverse populations. Curricula, both practica and coursework, should be infused with ways to recognize and adapt to cultural and language characteristics of the various American Indian cultures. Personnel who have American Indian clients are widespread, and it is inappropriate to assume that only a few persons on or near reservations need to work with American Indian students. In order to address the training needs, training programs should include coursework on: (a) recognition and sensitivity toward cultural diversity; (b) assessment and evaluation adaptations to standard procedures and interpretation of results; and (c) American Indians' values, beliefs, and lifestyles, including intertribal differences.

Varied and persistent efforts should be made to recruit and prepare American Indians who are familiar with American Indian youngsters, and are likely to relate more easily to them and would also recognize and accept cultural differences. They would be sensitive to the need to provide adaptations for cultural and/or language differences in diagnostic processes. It is recommended that training programs should make efforts to communicate with and recruit advanced students from tribal colleges, which make efforts to teach about and perpetuate American Indian languages and cultures.

Vocational Readiness. While there are unresolved questions as to whether American Indian students are correctly identified with learning disabilities or whether they are over-identified, it is recommended that culturally relevant curricula and instructional materials should be developed to teach vocational skills. In addition, it is recommended that: (a) vocational assessment devices should be investigated and employed to help adolescents with learning disabilities explore their vocational choices; (b) the curriculum should afford opportunities to learn about a wide variety of kinds of jobs, as well as the preparation and training required for those jobs; (c) instruction should be provided on where specific instruction or training for various jobs can be obtained and the cost, as well as what specific agencies might provide services required to help vocational proficiency; (d) specific strategies for locating jobs should be included in the curriculum, along with practice in filling out a variety of applications, including applications for tribal colleges and other institutions of higher education; and (e) students with learning disabilities should be taught skills for use in job interviews with practice on a variety of kinds of interviews. Since many American Indian students with and without learning disabilities do not complete high school, it is recommended that vocational training should be emphasized several years before the senior year in high school.

Post-Secondary Services. Forty-two colleges and agencies were identified which might provide post-secondary services for American Indians with learning disabilities in Montana. While the procedures employed to identify them might not have yielded an exhaustive list, they have been summarized and appear in Appendix A. It is recommended that practitioners use this listing and update it as additional information and services become available to develop a more complete and current resource for America Indian adolescents and adults with learning disabilities.

Conclusions

The high unemployment rate on these reservations must be recognized. Many American Indian adolescents with or without learning disabilities do not have role models for a wide variety of occupations or for job seeking. It is important to prepare students with learning disabilities, so they can be ready for immediate entry into the job market in entry level positions. However, schools and teachers must prepare students not only for what is, but for what could be. Increasing numbers of non-Indian persons with learning disabilities are attending and graduating from colleges and universities. Non-Indian persons with learning disabilities have attained careers in prestigious professions such as medicine and dentistry. With sufficient motivation, services, compensatory procedures, and adaptations, American Indian students with learning disabilities can achieve equally. The goal must be to permit every person with learning disabilities to become all he or she can be.

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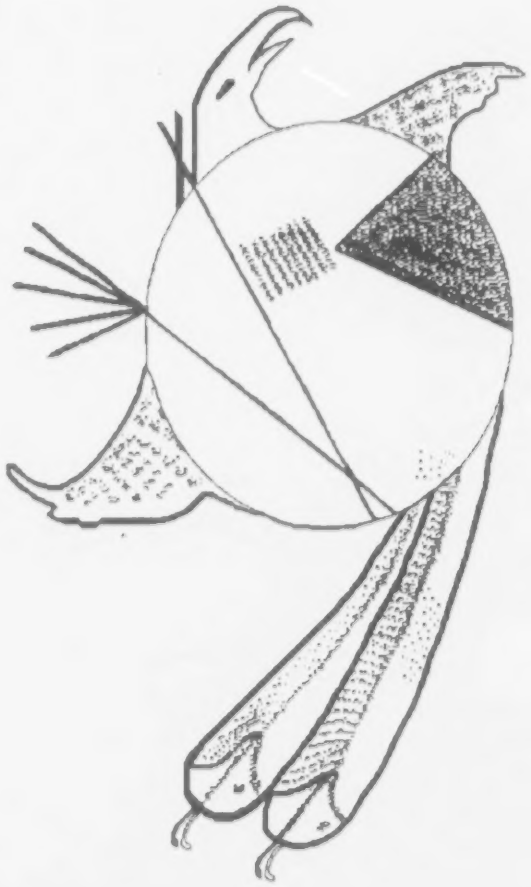
Appendix A

Post-Secondary Services for American Indians with Learning Disabilities Living in Montana



Post-Secondary Services for American Indians with Learning Disabilities Living in Montana

Adult Education Center

Lincoln Center
Billings, Montana 59101
(406) 255-3593
Contact Person: Jim Reno, Director of Adult Education

Access to Service
Walk-in

Cost of Services
None

Employment
Equal Opportunity Employer

Services
- Testing-ABLE test, no diagnostic testing, classroom observation, special accommodations such as adaptations made in the classroom for persons needing special attention
- Counseling
- One-to-one tutoring

Alternatives Incorporated

104 North 31st Street
Billings, Montana 59101
(406) 248-5851
Contact Person: Betty Roan, Supervisor

Access to Service
Referrals through the penal system, i.e., District Court, probation, and parole authorities

Cost of Services
No cost for most services

Employment
Currently employs several American Indians

Services
Offers alternative to jail for persons who have broken the law, including American Indians:
- Community service
- Work release
- Detention
- Domestic abuse intervention program
- Job development including Job Club training
- Drug and alcohol evaluations
- Referrals for persons needing specific aptitude testing to Adult Education, i.e., ABLE test

American Indian/Minority Student Services

Eastern Montana College
1500 North 30th Street
Liberal Arts Building, Room 222

Services
No services. Individuals are referred to Student Opportunity Services.

Beartooth Industries

17 East 11th Street
Red Lodge, Montana 59068
(406) 446-1722

Services
See Regional Services for the Disabled

Bighorn Industries

910 North Milesk
Hardin, Montana 59034

Services
See Regional Services for the Disabled

Billings American Indian Council

Post Office Box 853
2820 1st Avenue South
Billings, Montana 59103
Contact Person: John Robinson

Access to Service
Walk-in

Cost of Services
No cost with exception of drug and alcohol counseling

Employment
Persons with learning disabilities are taught basic skills and given placement at the agency, then placed in employment positions through other agencies or programs such as Job Training Partnership Act or private organizations. On-the-job training is often arranged through their own agency.

Services
- Assistance with employment for American Indians who are eligible under the program's guidelines
- Counseling most specifically for drug and alcohol problems
- Referral of persons with learning disabilities to appropriate agencies

Billings Area Indian Health-Audiology Department

711 Central, Post Office Box 2143
Billings, Montana 59103
Contact Person: Nancy Rice, Area Speech and Language Consultant

Access to Service
Referral through Tribal Health Departments

Cost of Services
None

Employment
Equal Opportunity Employer

Services
- Speech pathology services
- Testing for speech problems
- Vocational Rehabilitation referrals
- Vocational Rehabilitation counseling

Billings Workshop, Incorporated

200 South 24th Street
Billings, Montana 59101
(406) 248-9115
Contact Person: Bill Fortune, System Director

Access to Service
Clients are referred by other agencies as the Developmental Disability Division, Rehabilitation Services Division, and other agencies that specifically serve persons with learning disabilities.

Cost of Services
Cost varies with the service, but clients are funded through referring agencies. Typical Evaluation - $550, Work Adjustment - $43 per day, Sheltered Employment - $23-28 per day. Billings Workshop cannot serve persons without referring agency funding.

Employment
Equal Opportunity Employer

Services
- Vocational evaluation done at the Career Guidance Center
- Work adjustment training
- Community-based work adjustment outside of facility
- Sheltered employment
- Supportive employment

Blackfeet Community College

Browning, Montana 59417
(406) 338-5411, Ext. 209
Contact Person: Mike Hill, Director, Teacher Training Program and Acting Director of Adult Education

Access to Service
Through Mike Hill

Cost of Services
None

Employment
Equal Opportunity Employer. With few exceptions, everyone that works at and attends Blackfeet Community College is American Indian.

Services
No specific learning disabilities services but they do offer remedial classes and some person with learning disabilities are sometimes served through their adult literacy project.

Bureau of Indian Affairs

Federal Building
316 North 26th Street
Billings, Montana 59101
Contact Person: Louise Reyes, Social Service Director

Access to Service
Apply in person, must live on an Indian reservation to be eligible for services.

Cost of Services
None

Employment
Equal Opportunity Employer

Services
Learning disabilities services offered only for persons of high school age with a maximum age of 22. The only other services offered pertinent to persons with learning disabilities are counseling and assistance with employment through the General Child and Family Service Program.

Career Guidance Center

425 North 27th
Billings, Montana 59101
Contact Person: Russell Orr, Vocational Evaluator

Access to Service
Referrals through Vocational Rehabilitation, Veteran's Administration, school district, or other agencies

Cost of Services
Full evaluation cost is approximately $550-$600 for a week of testing. Clients needs to be referred through an agency so the agency will bear the cost of the testing.

Employment
Equal Opportunity Employer

Services
- ❖Full academic testing and counseling including spelling, math, and writing
- ❖Vocational testing and placement, career counseling
- ❖Job Club with interviewing and application skills tutoring
- ❖Special accommodations including magnifying lights and lamps, test readers, closed circuit television with tutorial firms

Carrol College
Helena, Montana 59625
(406) 442-3450
Contact Person: David Watson, Learning Center Director

Access to Service
Walk-in and referrals through instructors

Cost of Services
None

Employment
Equal Opportunity Employer

Services
- ❖Assessment for learning disabilities
- ❖Learning resources such as academic programs, skill studies, basic study skills, time management, tutors
- ❖Special accommodations such as extra time for test taking, readers, or a quieter environment
- ❖Limited counseling, more intense counseling needs are referred to the Student Development Center along with employment assistance needs
- ❖New program will set up a program for those determined to have a learning disability, similar to an Individual Achievement Program

College of Great Falls
Great Falls, Montana 59405
(406) 761-8210, ext. 212
Contact Person: Pat Beu, Learning Resource Counselor

Access to Service
Access through the college orientation process, referrals from instructors, introductory letters sent out to students at the beginning of the quarter.

Cost of Services
None

Employment
Equal Opportunity Employer

Services
- Tutoring, grammar and spelling assistance, extra test time
- Counseling, assistance with employment
- Basic skills testing
- Assistance with resume writing and interviewing processes
- Provide tape recorders
- Native American Club-Support Group

Dawson Community College

Glendive, Montana 59330
(406) 365-3396
Contact Person: Florence Garcia, Director Special Services

Access to Service
Walk-in and referrals by instructors

Cost of Services
None

Employment
Equal Opportunity Employer

Services
- Some tutoring and counseling
- Readers provided, tapes of books can be ordered
- General counseling
- Assistance with employment as needed
- Ethnic group services include a Native American studies program and an Indian club

Department of Family Services

1211 Grand, 2nd Floor Administration
Billings, Montana 59102
(406) 252-5601
Contact Person: Pat Beu, Learning Resource Counselor

Services
None

District 7 Human Resources Development Council (HRDC)

17 North 31st Street
Billings, Montana 59103
(406) 248-1477
Contact Person: Diane Hartman

Access to Service
Walk-in

Cost of Services
None

Employment
Equal Opportunity Employer

Services
No specific services for Native Americans with learning disabilities but they offer services that might be indirectly appropriate.
- Energy assistance
- Commodities
- Employment assistance if under 21 or over 60
- Self-sufficiency programs

Dullknife Memorial College
P. O. Box 98
Lame Deer, Montana 59043
Contact Person: Juanita Lone Bear, Director Student Support Services

Services
Services not presently offered, needs of students are being assessed.

Eastern Yellowstone County Special Education Co-operative
1932 U. S. Highway 87, Route 2
Billings, Montana 59101
(406) 252-4022

Services
Services offered are available only for children.

Easter Seal Society-Goodwill Industries
1130 16th Street West, Suite 6A
Billings, Montana 59102
(406) 252-9600

Services
Services focus on physically disabled and developmentally disabled persons, no particular emphasis on persons with learning disabilities.

Flathead Valley Community College

Kalispell, Montana 59901
(406) 752-5222
Contact Person: Launa Lackey, Advocate for Students with Disabilities

Access to Service
Walk-in, some referrals through registrar's office

Cost of Services
None

Employment
Equal Opportunity Employer

Services
- Special accommodations including note-taking, tutors, tape recorders, and special testing
- Diagnostic services-testing done by an in-house psychologist
- Counseling, 40 special groups for ethnic minorities-Beat Club, a club for Native Americans
- Other-Advocates for Students with Disabilities

Fort Belknap Community College

Harlem, Montana 59526
(406) 353-2803
Contact Person: Michele Lewis, Registrar

Services
No specific learning disabilities services offered due to lack of staff. Most services focus on physically disabled students.

Fort Peck Community College

Poplar, Montana 59255
(406) 768-5551
Contact Person: Clifford P. Goudelock, Director-Resou e Center and Adult Basic Education teacher

Services
Services are mostly aimed at pre-GED students and students with math or English limitation.
- Remedial work
- Academic testing such as the ABLE test

Indian Health Board of Billings

915 Broadwater Square
Post Office Box 203
Billings, Montana 59103
(406) 248-7318

Services
None

Job Connection
222 North 32nd Street, Suite 903
Billings, Montana 59102

Services
None

Job Service
624 North 24th
Billings, Montana 59101
Contact Person: Gary Lythgoe, Assistant Manager

Access to Service
Walk-in

Cost of Services
None

Employment
Equal Opportunity Employer

Services
- Aptitude testing but no learning disabilities diagnostic testing
- Counseling
- Assistance with employment

Kicking Horse Job Corps Center
2000 Mollman Pass Trail
Ronan, Montana 59864
(406) 644-2217
Contact Person: Charlie Camel, Vocational Director

Access to Service
Contacts from various communities in Montana, referrals from Job Service and other agencies, a program named Dynamic Science subcontracts with the Department of Labor and also provides referrals.

Cost of Services
None

Employment
Currently employ approximately 61 people, 50 of whom are American Indian.

Services
- Testing for reading and math levels, remedial math and reading classes offered
- Health consultant for counseling purposes (mental health), four professional counselors available for chemical dependency problems and others
- Recorders can be used during class time but no particular special accommodations are offered
- Assistance with employment, coordinate with college to provide job seeking skills courses, assistance with completion of job applications and interview skills
- Indian Club and cultural awareness classes

Little Big Horn College
Post Office Box 370
Crow Agency, Montana 59022

Services
None

Miles City Community College
Miles City, Montana 59301
(406) 232-3031
Contact Person: Nancy Reynolds, Director-Skills Center

Access to Service
Walk-in

Cost of Services
None

Employment
Equal Opportunity Employer, currently employ American Indians as work-study tutors

Services
- Academic placement testing for freshman with referrals to remedial courses
- No diagnostic testing offered
- Special accommodations include extended test-taking time, translation for mostly foreign students, recording of tests
- Academic counseling
- Employment assistance referred out
- Courses on study skills, stress management, test anxiety
- Computer program for test taking skills
- Test anxiety desensitization tapes
- Course on English as a second language but no Native Americans are presently in the course

Montana Independent Living Project
3310 2nd Avenue North
Billings, Montana 59101
(406) 259-5181
Contact person: Receptionist

Access to Service
Walk-in

Cost of Services
None

Employment
Equal Opportunity Employer

Services
Services are aimed at physically disabled persons. However, persons with learning disabilities might benefit from some of the services offered:
- Guidance and counseling to identify independent living needs, peer counseling, advocacy services regarding civil rights and responsibilities

Montana State University
Bozeman, Montana 59717
(406) 994-2824
Contact person: Bob Waters, Director - Resource Center

Access to Service
Resource Center: Walk-in, orientation outreach and on-campus media.

Cost of Services
None

Employment
Equal Opportunity Employer, current director of the Advance by Choice (ABC) Program is American Indian.

Services
- Diagnostic testing referred out to a local educational psychologist
- Counseling and advising
- Special accommodations include testing, readers, taped textbooks, recorders provided, communication with instructors re: special needs of students with learning disabilities
- Study skills and career decision workshops
- Tutoring and writing assistance (ABC program)
- Training on the use of microcomputers and work processors available in the center.
- Remedial math and English courses (Advance by Choice program)
- Personal identification cards specifying the person's disability type to use when explaining disability to instructors
- Prior registration to expedite special book ordering and schedule manipulation
- Special math and English classes specifically for students with learning disabilities (ABC program)
- Test-taking strategies, help with social skills, and one-on-one instruction (ABC program)

Northern Montana College
Havre, Montana 59501
(406) 256-3700
Contact person: Linda Hoiness, Learning Specialist

Access to Service
Walk-in, some referrals from professors.

Cost of Services
None

Employment
Equal Opportunity Employer, past director is American Indian.

Services
- Special accommodations such as alternative testing, oral testing, extended time, books on tapes, and notetakers
- Counseling such as academic and pre-advisement counseling
- Peer counseling

Office of Human Services (SRS)

3021 3rd Ave. North
Billings, Montana 59101
(406) 248-1691
Contact person: Lori Peterson-Yamamoto, Community-Social Work Supervisor

Access to Service
Walk-in

Cost of Services
None

Employment
Equal Opportunity Employer

Services
Persons served are those with developmental disabilities but also persons who might have a developmental disability and learning disability. Services offered:
- Residential programs-group homes
- Day program
- Foster homes
- Limited situational counseling
- Referrals to agencies to help with employment issues and job training
- Protective services for abuse cases

Regional Services for the Disabled

Box 31253
2110 Overland Ave., Suite 126
Billings, Montana 59107
(406) 652-5443
Contact person: Rhoda Miller, Executive Director
Beartooth Industries - Red Lodge, Tom Bush - Shop Supervisor
Snowy Mountain Industries - Lewistown, Randy Barta - Area Manager

Access to Service
Referrals through the welfare department, disabilities division, and other agencies

Cost of Services
None

Employment
Equal Opportunity Employer

Services
Regional Services for the disabled are incorporated with Bighorn, Beartooth, and Snowy Mountain Industries. All of them offer the same services, but the services are specifically offered to persons diagnosed as being developmentally disabled. Persons who have a learning disability as well as developmentally disabled are appropriate for their services, but persons who have solely a learning disability are not. Services offered include:
- ✣Supportive employment
- ✣Referrals for testing services
- ✣Counseling referrals through the local mental health agency
- ✣Work crews
- ✣Assistance with referrals for persons who are visually impaired
- ✣Skills training including job training skills, residential skills, independent living skills, social skills, communication, and vocational training through a day program

Rocky Mountain College
17th and Poly
Billings, Montana 59102
(406) 657-1000
Contact person: Eloise Wescott, Director of Student Services

Access to Service
Referrals through admissions, freshman initiation, walk-in

Cost of Services
None

Employment
Equal Opportunity Employer

Services
- ✣Placement testing, testing for individual learning difficulties, needs assessment
- ✣Counseling for course study, academic course selection advisement
- ✣Special accommodations tutors, taping of textbooks or other reading materials, taped lectures, notetakers provided, untimed testing sessions, less stressful atmosphere for testing provided
- ✣Assistance with employment referred to Career Planning

Salish Kootenai College
P. O. Box 117
Pablo, Montana 59855
(406) 675-4800
Contact person: Barbara Landstrom, Counselor/Director of Student Services - ACCESS

Access to Service
Referrals and walk-in

Cost of Services
None

Employment
Equal Opportunity Employer, currently employ several American Indians

Services
- Testing: Woodcock-Johnson, Detroit Test of Learning Aptitude, RAT, TABY, Vocational Decision Making Inventory, culture-free Self-Esteem Inventory, MESA System, COPS Interest Inventory, SIGI Plus
- Special accommodations: Note-taking, tape recorders, special arrangements made with instructors for extra time, quieter atmosphere, test readers, spell checkers, colored overlays for clarity, taping of textbooks
- Counseling of all students with disabilities including learning disabilities
- Assistance with employment is mostly through the tribal vocational rehabilitation office or the state vocational rehabilitation office, but Student Services is starting up a new program soon to be implemented. Other employment assistance services include a Job-Seeking Skills course and counseling in writing resumes, job applications, and interviewing
- Student peer advising for students needing one-on-one type of mentoring

Snowy Mountain Industries
132 Wunderlin
Lewistown, Montana 59457
(406) 538-5130

Services
See Regional Services for the Disabled

Social and Rehabilitation Services (SRS)
Miles City, Montana 59301
(406) 232-0583
Contact person: Kathleen Beauchot, Vocational Visual Services

Access to Service
Referrals through workman's compensation, walk-in

Cost of Services
None

Employment
They currently employ American Indians

Services
- Diagnostic testing, psychological testing, (both paid for by SRS but sent out), test reading to persons with learning disabilities by agency paid to do testing by SRS
- Buy tape recorders
- Tutoring
- Counseling-paid for by SRS but sent out to the Mental Health Center
- Training and placement, provide money for phone calls and transportation to job interviews

Special Training for Exceptional People

1826 Grand Ave.
Billings, Montana 59102
(406) 652-4422

Services
This agency serves children only

Stone Child College

Box Elder, Montana 59521
(406) 395-4313
Contact person: Voyd St. Pierre, Director of Adult Education (a program specifically designed for American Indians)

Access to Service
Walk-in

Cost of Services
None

Employment
Equal Opportunity Employer, currently employs several American Indians

Services
- Career counseling and personal guidance
- Special accommodations such as alternate tests, video tapes
- Resume writing skills and interviewing techniques

Student Opportunity Services (SOS)

Eastern Montana College
1500 North 30th Street
Billings, Montana 59101
Liberal Arts Building, Room 222
(406) 657-2162
Contact person: Kristi Savaria

Access to Service
Walk-in

Cost of Services
If a person is accepted for assistance there is no cost. If not accepted, there is a cost for tutoring that ranges for $4.50 - $6.00 an hour.

Employment
Equal Opportunity Employer

Services

- ❖Testing for students with learning disabilities using the Woodcock-Johnson Test, other tests are utilized as is appropriate
- ❖Assistance with registration
- ❖Tutoring
- ❖Scheduling assistance
- ❖Mentor program
- ❖Workshops on resume writing, speed reading, another issues
- ❖Study skills classes
- ❖Library skills tutoring
- ❖Monitoring and administration of class tests for students with learning disabilities
- ❖Free copies of library materials
- ❖Books recorded on tape

University of Montana

Missoula, Montana 59801
(406) 243-2243
Contact person: James Marks, Coordinator of Disability Services for Students

Access to Service

Apply to James Marks, referrals from instructors

Cost for Services

None

Employment

Equal Opportunity Employer

Services

- ❖Refer persons needing a diagnostic evaluation to the Psychology Department, Montana Vocational Rehabilitation, or Tribal Vocational Rehabilitation
- ❖Counseling, advisement, and disability counseling orientation
- ❖Tutoring
- ❖Provide letters to instructors when needed explaining student's disability
- ❖Extra test time, reading of tests, tape-recording of notes, make available computer software for spell checking, colored screens
- ❖Computerized books for the blind, voice synthesizer for persons with reading problems
- ❖Referrals to the math and writing labs
- ❖Assistance with employment referrals to the Career Services Department

Note: A support group is active on campus and has a subcommittee for students with learning disabilities and the next president of the group is said to be a person with learning disabilities.

Vocational Technical Center - Billings

3803 Central Avenue
Billings, Montana 59102
(406) 656-4445
Contact person: Susan Kerrick, Counselor in Admissions Office

Services
None

Vocational Technical Center - Butte

Basin Creek Road
Butte, Montana 59701
(406) 494-2910
Contact person: Jerry Martin, Assistant Director of Student Services

Services
No services available for students with learning disabilities. Students are referred to the Adult Education Program in the Butte School District.

Vocational Technical Center - Great Falls

2100 16th Avenue South
Great Falls, Montana 59405
(406) 711-7140
Contact person: Pat Kercher, chairperson of Student Services

Access to Service
In-services, brochures, advertisements, referrals from schools and agencies, walk-in

Cost of Services
No cost for special services, classes require tuition, $5 cost for the handbook.

Employment
Equal Opportunity Employer, several American Indians are employed at the center now.

Services
- ACCESS program for all students with disabilities
- BRIDGE program to assist high school level students with the transition from secondary education to higher education, vocational education, or the world of work
- Comprehensive vocational and academic assessment, use of MESA assessment test
- Career guidance and counseling
- Taped texts provided, videotaped classes for review
- PALS interactive computer assisted system for alphabet literacy
- Learning labs in all disciplines to provide tutorial support to strengthen skills in reading, vocational comprehension, English, spelling, and reading
- Adaptive equipment
- MASTER STUDENT course to teach students how to learn effectively, includes time management skills training, study skills training, tutoring in interpersonal relations and communication to facilitate confidence and esteem building
- Handbook available at $5 cost for faculty professionals interested in learning necessary information and practical tips in assisting and teaching students with all types of disabilities

Vocational Technical Center - Helena

1115 North Roberts
Helena, Montana 59601-309
(406) 444-6800
Contact person: Paul Justice, Admissions Officer

Access to Service
See Mike Bullock, Judy Hay, or go to tutorial lab

Cost for Services
None

Employment
Equal Opportunity Employer, no American Indians on staff but have had American Indian work study persons

Services
- Tutorial services, referrals made to agencies that can offer students special adaptive equipment

Vocational Technical Center - Missoula

909 South Avenue West
Missoula, Montana 59801
(406) 542-6883
Contact person: Charles Kuchera, Superintendent of Student Affairs

Access to Service
Walk-in

Cost
No cost for special accommodation or referrals

Employment
Equal Opportunity Employer, three American Indian persons on staff

Services
- Accommodations provided including allowance of tape recorders in classes, students are allowed to take notes for one another, extra test time given
- Referrals provided for other necessary services

Western Montana College

Dillon, Montana 59725
(406) 683-7330
Contact person: Clarence Kostelecky, Director of Learning Center and Coordinator of Developmental Education

Access to Service
Walk-in

Cost of Services
None

Employment
Equal Opportunity Employer

Services
- Peer tutoring or tutoring with Clarence
- Taped lectures, books, tape recorders provided
- Oral testing, extra test time, reading of tests
- Counseling and advising
- Developmental courses in reading, writing, spelling, math, and study skills
- Administration of the GED